

Strengthening exposure limits for toxic substance combinations.

Dr. Ronald N. Kostoff

Research Affiliate, School of Public Policy, Georgia Institute of Technology, USA

Gainesville, VA, 20155

Email: rkostoff@gmail.com

ABSTRACT

Toxic stimuli exposure limits are typically based on single stressor experiments, but are presently applicable to toxic stimuli in isolation or in combination with other toxic stimuli. In the latter case, typically less of each constituent of the combination is required to cause damage compared to the amount determined from single stressor experiments.

This monograph presents a simplified approach to improving regulatory exposure limits for toxic stimuli. The approach will partially account for the enhanced adverse effects of toxic stimuli combinations. It 1) assumes that all potential toxic stimuli to which an individual might be exposed have the same mechanisms/modes of action on biological mechanisms, and are, thus, indistinguishable by the impacted organism; 2) converts the doses of exposures to toxic stimuli to NOAEL fractions; 3) adds all the NOAEL fractions from these exposures to toxic stimuli; and 4) divides *all* the present exposure limits by the total number of NOAELs obtained. It would reduce present single-stressor-based exposure limits by an order of magnitude or more *across the board*.

The newly posited approach does not account for hormetic, antagonistic, or synergistic effects of toxic stimuli in combination. It does not adjust for 1) low-dose toxicants with adverse effects that have been under-reported, or 2) exposure limits (like the OSHA PELs) that are orders of magnitude above levels shown by published single stressor studies to have caused adverse effects.

KEYWORDS

Single Stressor Experiments; Exposure Limits; Combined Effects; Hormesis; Synergistic Effects; Cumulative Risk Assessment; Toxic Stimuli

CITATION TO MONOGRAPH

Kostoff RN. Strengthening exposure limits for toxic substance combinations. Georgia Institute of Technology. 2019. PDF.
<https://smartech.gatech.edu/handle/1853/61424>

COPYRIGHT AND CREATIVE COMMONS LICENSE

COPYRIGHT

Copyright © 2019 by Ronald N. Kostoff

Printed in the United States of America; First Printing, 2019

CREATIVE COMMONS LICENSE

This work can be copied and redistributed in any medium or format provided that credit is given to the original author. For more details on the CC BY license, see: <http://creativecommons.org/licenses/by/4.0/>

This work is licensed under a Creative Commons Attribution 4.0 International License<<http://creativecommons.org/licenses/by/4.0/>>.

DISCLAIMERS

The views in this monograph are solely those of the author, and do not represent the views of the Georgia Institute of Technology.

TABLE OF CONTENTS

TITLE

KEYWORDS

CITATION TO MONOGRAPH

COPYRIGHT

CREATIVE COMMONS LICENSE

DISCLAIMERS

ABSTRACT

Chapter 1 - Introduction and Background

1A. Overview

1B. Single Stressor Studies

1C. Stressor Combination Studies

1D. Impact of toxic stimuli combinations on setting safe exposure limits

Chapter 2. Methods, Results, and Discussion

2A. Intrinsic Flaw in Regulatory Process

2B. Role of combinations in correlation-causation nexus

2C. Numerical Difficulties in Setting Exposure Limits based on each Combination

2D. Proposed Regulatory Modification to Partially Account for Combinations

Chapter 3. Conclusions

Chapter 4. References

Chapter 5. Appendices

Appendix 1 - Numbers of Combinations of Potentially Toxic Stimuli

[Appendix 2 - Combining Hormetic Exposures](#)

[Appendix 3 - Potential Contributing Factors to AD](#)

[Chapter 6. Bibliography](#)

[A. Cumulative Risk Assessment](#)

[B. Combined Effects](#)

[C. Hormesis](#)

[D. Under-Reporting and Publication Bias in the Biomedical Literature](#)

[AUTHOR BIO](#)

Chapter 1. Introduction and Background

1A. Overview

Myriad regulatory agencies throughout the world have responsibility for protecting their constituents from the adverse effects of potential toxic stimuli. The data sources used by these agencies to determine safety have been of two main types: laboratory experiments (mainly on animals) and epidemiology studies (mainly on humans). By far, the dominant approach has been single stressor studies, mainly on animals. For example:

- "Over the past 35 years, the vast majority of risk assessments conducted by EPA have concentrated narrowly on individual chemical agents, distinct sources or source categories, and single exposure pathways, environmental media, routes of exposure, and health endpoints" [1];
- "Traditional chemical-specific risk assessment based on animal testing may be insufficient and the lack of toxicological studies on chemical mixtures remains a major regulatory challenge." [2];
- "The current chemical risk assessment approach is typically based on the toxicity caused by a single chemical on a variety of organs without acknowledging additional exposures to other chemicals also affecting the same organ or system." [3].

Typically, the effects of toxic stimuli *combinations* are not taken into account in setting regulatory exposure limits. The discipline called Cumulative Risk Assessment (CRA), or Cumulative Effects Assessment (CEA), evaluates the effects of multiple stressors acting through multiple pathways. Many/most of these studies address relatively few combinations, with some of the studies examining different stressors from the same general class. For readers interested in learning more about CRA/CEA, the [Bibliography Section \(A\)](#) on Cumulative Risk Assessment provides a number of useful references.

[Section B of the Bibliography](#) provides a comprehensive listing of articles focused on effects from combinations of stressors. Overwhelmingly, as the references in Section B show, combinations of stressors amplify the adverse effects

from single stressors, and lower the doses required for individual toxic stimuli to cause biological damage. The present monograph presents a simple approach for modifying regulatory exposure limits to partially compensate for the enhanced adverse effects from toxic stimuli combinations.

1B. Single Stressor Studies

In the data evaluation section of a 2018 monograph addressing the viability of OSHA's Permissible Exposure Limits [4], the overwhelming majority of the studies used by myriad regulatory agencies for determining harmful exposure levels were single stressor. These included studies for determining the:

- Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) [5-8],
- National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs) [9-12],
- American Conference of Government Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) [13-16] and Biological Exposure Indices (BEIs) [13, 17-18],
- Environmental Protection Agency (EPA) Inhalation Reference Concentration (RFC) [19-24] and Oral Reference Dose (RFD) [19, 25-26],
- Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels (MRLs) [27-31], and
- German Ad-hoc Working Group on Indoor Guidelines of the Indoor Air Hygiene Committee Health Precaution Guide Value (RWI) and Health Hazard Guide Value (RWII) [32-36].

1C. Stressor Combination Studies

Numerous biomedical studies have shown that combinations of stressors can enhance the adverse effects of any one of their constituents (relative to its effects when acting in isolation) [37-43]. As stated previously, [Section B of the Bibliography](#) provides a comprehensive listing of articles focused on effects from combinations of stressors. These stressors are not limited to chemicals, but can

include radiation (ionizing and non-ionizing; visible and non-visible), heat, force, sound, biotoxins, iatrogenic, lifestyle choices, socioeconomic factors, physical and emotional stress, and many others. Only few combinations of potentially toxic stimuli decrease the adverse effects of any constituent, and some/many of these may occur at low toxic stimuli doses in the hormetic range.

In the case of contributions to disease, toxic stimuli combinations typically allow less of each component to cause damage compared to the levels obtained when examining the toxicity of each component in isolation (single stressor experiment, for assessing damage of the potentially toxic stimulus). For example:

- A study entitled "Synergistic toxicity produced by mixtures of biocompatible gold nanoparticles and widely used surfactants" [44] showed that these mixtures produced synergistic toxicity at concentrations where the individual components were benign.
- A second study entitled "Synergistic action of the nephrotoxic mycotoxins ochratoxin A and citrinin at nanomolar concentrations in human proximal tubule-derived cells" [45] showed that only concurrent (but not individual) exposure to OTA [ochratoxin A] and CIT [citrin] at nanomolar concentrations led to (i) an increase of TNF protein and mRNA, (ii) a decrease of COX-2 protein and mRNA, (iii) a decrease of E-cadherin protein and (iv) an increase of vimentin and alpha-SMA protein.
- A third study entitled "DNA damage in rat lymphocytes treated in vitro with iron cations and exposed to 7 Mt magnetic fields (Static Or 50 Hz)" [46] showed that lymphocyte exposure to magnetic fields (MF) at 7 mT did not increase the number of cells with DNA damage in the comet assay. Incubation of lymphocytes with 10 mug/ml FeCl₂ did not produce a detectable damage of DNA either. However, when the FeCl₂-incubated lymphocytes were simultaneously exposed to 7 mT MF the number of damaged cells was significantly increased and reached about 20% for static MF and 15% for power frequency MF.

1D. Impact of toxic stimuli combinations on setting safe exposure limits

Thus, when setting safe exposure limits for a constituent of a given combination based on results from experiments involving that constituent in isolation (single stressor), the exposure limit values will be substantially higher than those at which the constituent might cause damage when used in combination. Stated differently, "When multiple components in a sample, even at low concentrations, affect the same pathway, their combined toxicity can usually be described by the concentration addition concept and may induce significant toxicity to aquatic organisms" [47]. It should be emphasized this quoted statement holds strictly when it is known that the *same* pathway is affected by the multiple components.

There have been myriad approaches proposed to assess the effects of multiple toxic stimuli [1, 48]. A survey of the history of methods for "evaluation of cumulative health risks from the combined effects of multiple environmental stressors" [1] provides some idea of the progress made towards this goal. As stated previously, [Section A of the Bibliography](#) provides a comprehensive listing of articles focused on the general topic of Cumulative Risk Assessment. Other credible studies show the Concentration Addition approach simulates the toxicity of mixtures reasonably well [47, 49]. These approaches tend to be *a posteriori*, examining impacts of combinations after the fact.

The more important question is how can these demonstrated enhanced adverse effects, resulting from combinations of toxic stimuli, be exploited to ***improve the regulatory process for setting exposure limits on individual toxic stimuli?*** Given the numbers of potentially toxic stimuli in the environment, in occupational settings, and in daily life, the numbers of potential toxic stimuli combinations are essentially infinite [43]. The dose levels of each combination constituent that can cause damage can vary depending on the numbers, types, timing, and dosages of other constituents of the combination [43]. [Appendix 1](#) provides an estimate of numbers of combinations (with different numbers of constituents) of toxic stimuli possible.

Thus, there are effectively an infinite number of dose levels of any constituent that could be used as a threshold for initiating damage, since there are essentially an infinite number of combinations of toxic stimuli. This reality is orthogonal to the present exposure limit regulatory process, where each constituent

is given one exposure limit (for a pre-specified exposure duration) based on single stressor experiments, and this exposure limit is expected to be relevant under all conditions.

This monograph presents a regulatory-enhancing approach that is

- credible,
- correct in at least one limiting case,
- relatively simple to apply to all toxic stimuli, and
- capable of adjusting regulatory exposure limits to partially compensate for the added damage of toxic stimuli *combinations*.

Chapter 2. Methods, Results, and Discussion

2A. Intrinsic Flaw in Regulatory Process

Single stressor experiments used as a basis for setting regulatory exposure limits have an intrinsic flaw not emphasized sufficiently by researchers and regulators alike. For illustrative purposes, consider the following simple hypothetical example. Assume we have a country of five million people.

Case 1. Assume:

- we divide this country into five groups of one million people per group;
- we have five different toxic chemicals;
- each group is exposed to one chemical only, at the NOAEL dose for that chemical;
- each of the five NOAELs is identical.

By NOAEL definition, there should be no adverse effects among any of the five million people from exposure to these five chemicals.

Case 2. Assume:

- we re-divide the country into two groups, where Group A has four million people and Group B has one million people;
- Group A is *not* exposed to any of the five chemicals, and Group B is exposed to *all* the five chemicals, again at the NOAEL dose level for each chemical;
- each of the five chemicals exerts identical pathological effects, through the same signaling pathways (identical mechanisms/modes of action).

Then, each of the one million members of Group B will be exposed to an effective dose of 5xNOAEL. This means that one million people will (potentially) experience adverse effects, since the NOAEL dose level has been exceeded. The

four million people in Group A will experience no adverse effects, since they have not been exposed to these chemicals.

Thus, the total amount of the five chemicals used has remained the same in both cases, but the number of people experiencing adverse effects has increased from zero to (potentially) one million because the chemicals were used in combination. *These adverse effects from the combination would not have been predicted from the single stressor tests, since the single stressor tests for each constituent showed no adverse effects at the NOAEL level.* This limiting case (where the chemicals are effectively the same from the perspective of the test subjects) shows the *necessity of testing potentially toxic stimuli in combinations as a basis for setting regulations on exposure limits.*

2B. Role of combinations in correlation-causation nexus

There are further benefits that can be obtained from this type of simple hypothetical example (see [Appendix 2](#) for application to hormesis, and see [Bibliography Section C](#) for representative references related to hormesis). For example, many epidemiology studies attempt to extract correlations from data to serve as a starting point for showing causation. A study may show that substance A increased at a given rate over some period of time, and disease B increased at the same rate over the same period of time. Therefore, the correlation between substance A and disease B could serve as a starting point for identifying the mechanisms by which substance A could contribute to disease B.

However, **absence of evidence is not evidence of absence!** As the hypothetical example above shows, lack of correlation does not exclude causation. One needs to ensure that the appropriate variables, or, in the present case, combinations of variables, are selected for evaluating correlation. Trends in *combinations of potential toxic stimuli* need to be considered when evaluating a correlation-causation nexus.

Consider the 2014 study by Nevison [50] to identify potential autism environmental contributing factors by correlating those contributing factors whose temporal increases parallel the observed temporal increases in autism. The author started with "a list of the top ten environmental compounds suspected of causing autism and learning disabilities". She found that "Most of the suspected environmental toxins examined have flat or decreasing temporal trends that

correlate poorly to the rise in autism. Some, including lead, organochlorine pesticides and vehicular emissions, have strongly decreasing trends. Among the suspected toxins surveyed, polybrominated diphenyl ethers, aluminum adjuvants, and the herbicide glyphosate have increasing trends that correlate positively to the rise in autism." She did not look at the trends of toxic stimuli ***combinations*** within the ten (including those toxicants whose trends were flat or decreased over time), but rather concentrated on trends of specific toxic stimuli. There remains the possibility that the toxic stimuli combinations could potentially account for some/much of the increase in autism.

2C. Numerical Difficulties in Setting Exposure Limits based on each Combination

In the USA, there are about 85,000 chemicals in commerce registered with the US Environmental Protection Agency (EPA) through the Toxic Substances Control Act inventory [51]. An analysis of the PUBMED MeSH Tree showed the existence of ~4,000 described diseases [52]. Thus, there are about 340,000,000 potential one-to-one chemical-disease combinations that would have to be examined to assess which of the chemicals are contributing factors to which diseases. Most of these 340,000,000 potential chemical-disease combinations have not been tested for chemicals applied ***in isolation*** (the contribution of one chemical to one disease), much less in ***combinations*** reflective of real-world exposures [43, 53].

In the USA, federal legally enforceable occupational exposure limit regulations are governed by the Occupational Safety and Health Administration (OSHA). Of the ~85,000 chemicals referenced above, perhaps ~500 are regulated by OSHA through their issuance of Permissible Exposure Limits (PELs). A 2018 monograph [4] shows that (based on sampling ten of these ~500 OSHA 'regulated' chemicals) the OSHA PELs are typically **one-four orders-of-magnitude higher than exposures shown in the biomedical literature to cause biological damage/adverse health effects.**

[Section 1B](#) above and companion studies [43, 53] show that most of the biomedical literature-based toxic stimuli exposures on which the OSHA PEL regulations (as well as other Agency regulations and guidelines) depend are exposures in isolation (one chemical used in the experiment). When exposures to these chemicals are combined as in the real-world, synergistic effects that magnify

their damage are often the result. Thus, the one-four orders-of-magnitude gap for OSHA PELs mentioned in the previous paragraph would be **increased** when toxic stimuli are combined.

Further, a 2016 paper [54] shows that 1) some/many adverse health effects from toxic stimuli have been under-reported in the biomedical literature (see [Section D of the Bibliography](#) for references that address this under-reporting and associated publication bias) and 2) some/many of the studies reported in the biomedical literature have been manipulated to underestimate the severity of the results, especially for topics that have political/commercial/military sensitivity. In many respects, the *USA workplace is effectively unregulated for chemical exposures*, given the orders-of-magnitude difference between 1) the regulated OSHA PEL exposure limits, and 2) the levels of exposures shown in the biomedical literature to cause damage.

In the eBook entitled "Pervasive Causes of Disease" [52], ~8,000 factors (chemicals, radiations, drugs, biotoxins, etc) that potentially contributed to the ~4,000 diseases were identified. These ~8,000 contributing factors were obtained from analyses of the existing biomedical literature, and should be viewed as a very low floor. Only a miniscule fraction of the 340,000,000 chemical-disease pairs mentioned at the beginning of Section 2B have been tested (much less the other non-chemical toxicant-disease pairs) and published in the biomedical literature. About 800 of these ~8,000 potential disease contributing factors (e.g., smoking, pesticides, high-fat diets, heavy metals, advanced glycation end products, etc) were judged to be 'pervasive' in [52], i.e., they contributed to at least a threshold number (many tens) of diseases.

How many of these potential disease contributing factors might contribute to a specific disease? In the past five years, the author has identified potential contributing factors (existing and discovered) to two major chronic diseases, Chronic Kidney Disease (CKD) [55] and Alzheimer's Disease (AD) [56], as part of protocol development to prevent and reverse these diseases. For both CKD and AD, on the order of ~500 potential contributing factors were identified (as an example, see [Appendix 3](#) for the potential contributing factors to AD). Again, this number should be viewed as a floor, given 1) the limitations on full inclusion of contributing factors that have been reported in the literature for these two chronic diseases, and 2) the text mining limitations on extracting potential contributing factors from these text databases. Many of these potential contributing factors

were pervasive based on the eBook findings, but many were not. Ongoing studies by the author's research group for reversing two other major chronic neurological diseases are showing the same orders-of-magnitude of numbers of potential contributing factors to these two additional diseases.

Again, absence of evidence is not evidence of absence. Many potential contributing factors (pervasive or not) to any given disease did not surface in the eBook because:

- the research had not been done on the linkage between the potential toxic stimulus and the disease, or
- the research had been done but not reported, or
- the research had been reported improperly.

These research/reporting deficiencies resulted in severe limitations on the total number of potential disease contributing factors reported, and the number reported that could pass the numerical threshold of pervasiveness.

The disease reversal protocol for CKD and AD [55, 56] requires that major contributing factors to any of these chronic diseases be eliminated before disease reversal is even remotely possible. Therefore, ***minimizing toxic stimuli exposures becomes central to healing***. Minimizing toxic stimuli exposures can be accomplished in at least two ways: avoidance and regulation.

Toxicant exposures can (in theory) be avoided, although this may not be realistically possible in many cases. Additionally, government can regulate toxic stimuli exposure ceilings, to minimize those toxic stimuli exposures that cannot (in practice) be avoided. If government regulations are inadequate, then the likelihood of developing chronic diseases will be increased and the likelihood of reversing (or preventing) these diseases will be decreased. ***Inadequate government regulations on potentially toxic exposures can be viewed effectively as government promoting/mandating the development of myriad chronic diseases!***

2D. Proposed Regulatory Modification to Partially Account for Combinations

The end goal of this monograph is to propose a revision to existing regulatory exposure limits for potentially toxic substances that would partially reflect and compensate for the enhanced adverse effects of toxic stimuli

combinations. Such a revision would have to be credible, simple, and not overly harsh or restrictive, or it would have no chance of implementation.

The basic concept underlying the proposed revision is based on the hypothetical limiting condition of [Section 2A](#). Concept implementation requires:

- assuming that all potential toxic stimuli to which an individual might be exposed have the same mechanisms/modes of action on the biological mechanisms;
- converting the doses of toxic stimuli exposures to NOAEL fractions;
- adding all the NOAEL fractions from these toxic stimuli exposures;
- dividing *all* the present toxic stimuli exposure limits by the total number of NOAELs obtained.

Since, (in the foreseeable future, for a given regulation-setting Agency) one exposure limit value (or perhaps an acute and chronic value) is set for a given toxic stimulus, the individual-oriented concept of the previous paragraph needs to be converted to a population-oriented concept. This would require generating a distribution function of exposures for a representative sample of myriad individuals to a full spectrum of potential toxic stimuli, and performing statistical analyses on the resulting population-based distribution functions. This integrating/averaging process would arrive at the requisite NOAEL fractions to which the sample population is exposed for each of the selected toxic stimuli exposures, which would then be summed over all the selected potential toxic stimuli to provide the total number of NOAELs to be used for existing exposure limit reduction.

For example, suppose there were five potentially toxic stimuli to which the greater population could be exposed. Suppose, after a representative sample of people had been selected, measurements of their exposures to these toxic stimuli showed that average exposure to:

- Toxic Stimulus 1 (TS1) was 0.5 times present NOAEL1,
- TS2 was 0.6 NOAEL2,
- TS3 was 0.7 NOAEL3,
- TS4 was 0.8 NOAEL4, and

- TS5 was 0.9 NOAEL5.

Then, the sum of these five NOAEL coefficients (fractional NOAEL exposures, assuming equal importance of all five NOAELs), would be 3.5. The proposed algorithm would reduce the present day exposure limits for ALL toxic stimuli by a factor of 3.5. Obviously, this excludes any hormetic, antagonistic, or synergistic effects among combination members, and thus would be 'exact' only for the hypothetical limiting case of identical mechanisms/modes of action among all potentially toxic stimuli.

Based on the approximately 500 potential contributing factors for each of the two chronic diseases (CKD, AD) identified already (with the very real possibility that hundreds or thousands more contributing factors could be identified if all the e.g. 85,000 chemicals in use were evaluated for their contributions to diseases in isolation or in combination), how many of these ~500 potential contributing factors could any one person be expected to encounter? That question cannot be answered with any degree of credibility at present, since there are extremely limited data on all the myriad potentially toxic stimuli exposures to which people are subjected over their lifetimes.

To obtain such cumulative exposure data, people would need to be instrumented for many years with myriad devices to measure temporal exposures to 1) myriad radiation fields, 2) thousands or tens of thousands of chemicals, 3) thousands of non-chemical substances, etc. Given the effectively infinite number of combinations of toxicants possible from the many thousands of toxic stimuli already shown to contribute to myriad diseases (~8,000, based on the limited results shown in [52]), there is little hope of identifying effective NOAELs for all the constituents in each combination within the foreseeable future.

A credible process that would provide a first-order approximation to the full-scale challenge outlined above is as follows. The pervasive causes of disease approach presented in [52] would be updated and upgraded, to both include the most recent information and cover a broader expanse of biomedical literature using more powerful computer capabilities. Let's assume that 1,000 pervasive causes of disease would be identified (in [52], the causes/contributing factors were classified as *foundational*, which meant they were tangible primary causes of disease over which potential victims had some control, such as smoking, high-fat-diet, iatrogenic surgical procedures, iatrogenic drugs, radiation exposures, heavy metals,

food additives, insufficient exercise, brominated fire retardants, etc (See [Appendix 3](#) for a taxonomy/list of potential *foundational* contributing factors to AD).

These ~1,000 pervasive causes of disease would serve as the 'pool' from which toxic stimuli would be selected for purposes of identifying average fractional NOAEL levels of exposure. A sample of the population would be selected, and their exposures to selected toxic stimuli from this 'pool' would be ascertained. To insure adequate protection for the most vulnerable members of our population, this sample could be weighted towards people who serve on the front-lines of deploying (and living nearby) much of the advanced technology responsible for major contributions to disease, such as farmers/gardeners (pesticides), cell tower service personnel (wireless radiation), miners (particles, heavy metals), radiotherapy technicians/radiopharmaceutical diagnosticians (ionizing radiation), etc.

These exposures to selected toxic stimuli could be ascertained in at least three ways. First, if the exposure data is already in the literature, the literature could be scanned for population distributions of exposures to these selected toxic stimuli.

Second, the sample members could be queried for their exposure levels to these selected toxic stimuli. This would be relatively credible for contributing factors related to lifestyle (e.g., diet, exercise, sleep, recreational substances, etc), iatrogenic (e.g., surgeries, drugs, diagnostics, etc), and some occupational/environmental exposures (e.g., noise, air pollution, some types of ionizing radiation, etc). It would not be credible for many of the occupational/environmental exposures, since most people have little or no knowledge of their exposures to specific toxic stimuli (chemicals, radiation, etc) at their workplace, in their environment, and in their home.

Third, the population sample could be instrumented, and some of the unknown occupational/environmental/home exposures to toxic stimuli could be measured. Measuring exposure trajectories over the long-term is probably not realistic given today's technologies, but acute (perhaps one or two day) exposure trajectories might be doable. In the future, imbedded chip technologies might allow much longer-term exposure measurements to be made.

Once these exposures to selected toxic stimuli have been ascertained for the sample population by the above three (and perhaps other) approaches, then the distributions can be generated, and the statistical assessments can be performed.

The fractional or integer NOAEL coefficient levels would be summed over all toxic stimuli selected, and the result used as the denominator for reducing the present regulatory exposure limits to partially account for exposures to combinations of toxic stimuli. Myriad rules could be added to the numerical process, such as 1) assuming exposures $<0.25 \times \text{NOAEL}$ could be hormetic and setting their contribution to the reduction factor to zero, and/or 2) assuming exposures $>0.5 \times \text{NOAEL}$ could be synergistic and setting their contribution to the reduction factor to unity.

What levels of exposure limit reduction should we expect to partially account for effects of toxic stimuli combinations? Over the past four years, the author has reviewed many thousands of potential disease contributing factors identified in [52]. It would not be unreasonable to expect many people to be exposed to at least tens (perhaps many tens) of these potential contributing factors at near-NOAEL or greater levels, especially those contributing factors that have been characterized as 'pervasive' [52]. Then, in this hypothetical limiting case of identical mechanisms/modes of action, the cumulative exposure would be on the order of tens or hundreds of NOAELs. This means that present regulatory exposure limits would need to be set one or more orders of magnitude lower ***across the board*** to avoid increasing the risk of major chronic diseases from large combinations of contributing factors.

However, based on the results from [4, 43, 53], the actual exposure limit reduction numbers computed with the above process may be far larger. As was shown in [4] for the ten sampled substances that OSHA regulates, the PELs could range anywhere from about an order of magnitude above an effective NOAEL to about four orders-of-magnitude above an effective NOAEL. Thus, for example, people who worked in an environment where they were exposed to all ten of these sampled substances in [4] could have an exposure limit reduction on the order of three orders of magnitude based on these ten toxic stimuli alone! Much of that reduction is not due to the effect of combinations, but rather to the present-day PELs not reflecting the exposure limits shown by the biomedical literature to cause damage.

To compensate for this influence of non-combination effects on the computation of the combination toxic stimuli exposure limit reduction factor, the value of any toxic stimulus NOAEL fraction/coefficient could be limited to unity (i.e., any NOAEL fraction that was greater than one would be set equal to one).

Thus, for the ten sampled substances example above [4], the total of their NOAEL coefficients used for computing reduction in present exposure limits to account for combinations would be ten. Hopefully, when the PELs are reduced to reflect biomedical literature results, the limit on NOAEL coefficient values to unity for any toxic stimulus would be exact for the hypothetical limiting case for identical mechanisms/modes of action.

Thus, if e.g. the sampling results show that the total fractional NOAEL exposure coefficients sum to 100, then the NOAELs would be reduced to one percent of their single stressor values *across the board* (for *all* toxic stimuli exposure limits). The results could always be weighted for different levels of exposure relative to NOAEL values, or for different levels of importance for the different toxic stimuli.

Chapter 3. Conclusions

Toxic stimuli exposure limits are typically based on single stressor experiments, but are presently applicable to toxic stimuli in isolation or in combination with other toxic stimuli. In the latter case, typically less of each constituent of the combination is required to cause damage compared to the amount determined from single stressor experiments.

This monograph advances a simplified improved regulatory approach that will partially account for the enhanced adverse effects of combinations of toxic stimuli. It essentially divides all NOAEL dose levels by the sum of fractional NOAELs of toxic stimuli to which a representative sample of people are exposed. It would reduce present single-stressor-based NOAEL levels by an order of magnitude or more *across the board*.

It does not account for hormetic, antagonistic, or synergistic effects of toxic stimuli in combination. It does not adjust for low-dose toxicants with adverse effects that have been under-reported, nor does it adjust for exposure limits like the OSHA PELs that are orders of magnitude above levels shown by published single stressor studies to have caused adverse effects.

Chapter 4. References

1. Sexton K. Cumulative risk assessment: an overview of methodological approaches for evaluating combined health effects from exposure to multiple environmental stressors. *International journal of environmental research and public health*. 2012;9(2):370-90.
2. Hernandez AF, Tsatsakis AM. Human exposure to chemical mixtures: Challenges for the integration of toxicology with epidemiology data in risk assessment. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2017;103:188-93.
3. Maffini MV, Neltner TG. Brain drain: the cost of neglected responsibilities in evaluating cumulative effects of environmental chemicals. *Journal of epidemiology and community health*. 2015;69(5):496-9.
4. Kostoff RN. OSHA Permissible Exposure Limits (PELs) are too Permissive. Georgia Institute of Technology. 2018a. PDF. <http://hdl.handle.net/1853/60067>. Also accessed at: <https://smartech.gatech.edu/handle/1853/60067>.
5. OSH Act of 1970. <https://www.osha.gov/laws-regs/oshact/completeoshact>
6. Permissible Exposure Limits - Annotated Tables. Occupational Safety and Health Administration. United States Department of Labor. <https://www.osha.gov/dsg/annotated-pels/tablez-1.html>
7. 1988 OSHA PEL Project Documentation - Allyl Chloride. <https://www.cdc.gov/niosh/pel88/107-05.html>
8. 1988 OSHA PEL Project Documentation - Amitrole. <https://www.cdc.gov/niosh/pel88/61-82.html>
9. OSHA-RELS. <https://www.osha.gov/dsg/annotated-pels/>
10. NIOSH RELs. RTECS. Acetic Acid. http://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/5678550/FID2757/nioshdb/rtecs/af12b128.htm
11. NIOSH RELs. RTECS. Styrene. http://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/5678550/FID2757/nioshdb/rtecs/wl381378.htm
12. NIOSH RELs. RTECS. Citric Acid

http://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/5678550/FID2757/nioshdb/rtecs/ge7026f0.htm

13. OSHA-TVLs/BEIs.

<https://www.osha.gov/dsg/annotated-pels/>

14. 1,3-Butadiene: TLV(R) Chemical Substances 7th Edition Documentation. ACGIH(R). 7DOC-044. 2001. American Conference of Governmental Industrial Hygienists. Cincinnati, OH.

15. 1,1-Dichloroethane: TLV(R) Chemical Substances 7th Edition Documentation. ACGIH(R). 7DOC-167. 2001. American Conference of Governmental Industrial Hygienists. Cincinnati, OH.

16. Diethylamine: TLV(R) 7th Edition Documentation. ACGIH(R). 7DOC-204. 2013. American Conference of Governmental Industrial Hygienists. Cincinnati, OH.

https://hero.epa.gov/hero/index.cfm/reference/details/reference_id/1325991

17. 1,3-Butadiene: BEI(R) 7th Edition Documentation. ACGIH(R). 7DOC-737. 2006. American Conference of Governmental Industrial Hygienists. Cincinnati, OH.

18. 2-Propanol: BEI(R) 7th Edition Documentation. ACGIH(R). 7DOC-741. 2006. American Conference of Governmental Industrial Hygienists. Cincinnati, OH.

19. EPA-RfCs/RfDs.

https://epa-prgs.ornl.gov/chemicals/help/documents/METHODS_FOR_DERIVATION.PDF

20. Dorman DC, Struve MF, Wong BA, Gross EA, Parkinson C, Willson GA, et al. Derivation of an inhalation reference concentration based upon olfactory neuronal loss in male rats following subchronic acetaldehyde inhalation. Inhalation toxicology. 2008;20(3):245-56.

21. EPA - Inhalation Reference concentration (RfC) for Carbon Disulfide. EPZhttps://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0217_summary.pdf

22. EPA - Inhalation Reference concentration (RfC) for Carbon Tetrachloride
https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0020_summary.pdf

23. EPA - Inhalation Reference concentration (RfC) for Hydrogen Sulfide
https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0061_summary.pdf

24. EPA - Inhalation Reference concentration (RfC) for Methyl Isobutyl Ketone

https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=173

25. EPA - Oral Reference Dose (RfD) for Barium and Compounds
https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0010_summary.pdf

26. EPA - Oral Reference Dose (RfD) for Acetochlor
https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0521_summary.pdf

27. ATSDR-MRLs.

<https://www.atsdr.cdc.gov/mrls/index.asp>

28. ASTDR Minimal Risk Levels (MRL) - Carbon Disulfide
<https://www.atsdr.cdc.gov/mrls/mrlolist.asp#84tag>

29. ASTDR Minimal Risk Levels (MRL) - Ethyl Benzene
<https://www.atsdr.cdc.gov/mrls/mrlolist.asp#66tag>

30. ASTDR Minimal Risk Levels (MRL) - Carbon Tetrachloride.
<https://www.atsdr.cdc.gov/mrls/mrlolist.asp#66tag>

31. ASTDR Minimal Risk Levels (MRL) - Hydrogen Sulfide
<https://www.atsdr.cdc.gov/mrls/mrlolist.asp#66tag>

32. Indoor air guide values for acetaldehyde. Announcement of the German Ad-hoc Working Group on Indoor Guidelines of the Indoor Air Hygiene Committee and of the States' Supreme Health Authorities. Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz. 2013;56(10):1434-47.

33. Bekanntmachung des U. Health evaluation of trichloroethylene in indoor air : communication from the German ad-hoc working group on indoor guidelines of the Indoor Air Hygiene Committee and of the states' supreme health authorities. Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz. 2015;58(7):762-8.

34. Mitteilung A-H-A. Indoor air guide values for naphthalene and naphthalene-like compounds. Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz. 2013;56(10):1448-59.

35. Indoor air guide values for ethyl acetate. Communication of the German Ad Hoc Working Group on Indoor Air Guidelines of the Indoor Air Hygiene Committee and the Supreme State Health Authorities. *Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz*. 2014;57(12):1442-50.

36. Indoor air guide values for methyl isobutyl ketone. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz*. 2013;56(1):148-58.

37. Hernandez AF, Parron T, Tsatsakis AM, Requena M, Alarcon R, Lopez-Guarnido O. Toxic effects of pesticide mixtures at a molecular level: their relevance to human health. *Toxicology*. 2013;307:136-45.

38. Vardavas AI, Fragkiadaki P, Alegakis AK, Kouretas D, Goutzourelas N, Tsiaoussis J, Tsitsimpikou C, Stivaktakis PD, Carvalho F, Tsatsakis AM. Downgrading the systemic condition of rabbits after long term exposure to cypermethrin and piperonyl butoxide. *Life Sci*. 2016;145:114-20.

39. Docea AO, Calina D, Gofita E, Arsene AL, Kouretas D, Tsatsarakis M, Nosyrev A, Golokhvast K, Gutnikov S, Rakitskii V, Tsatsakis A. Effects of long-term low dose exposure to mixtures of pesticides, food additives and consumer products chemicals on biochemical parameters. *Toxicology Letters*. 2017;280:S217-S.

40. Kalogeraki A, Stivaktakis P, Docea A, Calina D, Gofita E, Arsene AL, Nikitovic D, Tzardi M, Tsatsakis A. Evaluation of long term low dose exposure to mixtures on the lymphocytes of the peripheral blood of rats. *Toxicology Letters*. 2017;280:S126-S.

41. Buha A, Matovic V, Antonijevic B, Bulat Z, Curcic M, Renieri EA, Tsatsakis AM, Schweitzer A, Wallace D. Overview of Cadmium Thyroid Disrupting Effects and Mechanisms. *Int J Mol Sci*. 2018 May 17;19(5).

42. Kostoff RN, Lau CGY. Modified health effects of non-ionizing electromagnetic radiation combined with other agents reported in the biomedical literature. in C.D. Geddes (ed.), *Microwave Effects on DNA and Proteins*. Chapter 4. 97-157. © Springer International Publishing AG 2017. DOI 10.1007/978-3-319-50289-2_4.

43. Kostoff RN. Effects of toxic stimuli combinations on determination of exposure limits. Georgia Institute of Technology. 2018b. PDF. <http://hdl.handle.net/1853/59719>. Also accessed at: <https://smartech.gatech.edu/handle/1853/59719>.

44. Ginzburg AL, Truong L, Tanguay RL, Hutchison JE. Synergistic toxicity produced by mixtures of biocompatible gold nanoparticles and widely used surfactants. *ACS nano*. 2018; 12(6);5312-5322. DOI:10.1021/acsnano.8b00036.

45. Schulz MC, Schumann L, Rottkord U, Humpf HU, Gekle M, Schwerdt G. Synergistic action of the nephrotoxic mycotoxins ochratoxin A and citrinin at nanomolar concentrations in human proximal tubule-derived cells. *Toxicology Letters*. 2018;291; 149-157. DOI:10.1016/j.toxlet.2018.04.014

46. Zmyslony M, Palus J, Jajte J, Dziubaltowska E, Rajkowska E. DNA damage in rat lymphocytes treated in vitro with iron cations and exposed to 7 mT magnetic fields (static or 50 Hz). *Mutation research*. 2000;453(1);89-96. DOI:10.1016/S0027-5107(00)00094-4.

47. Gustavsson M, Kreuger J, Bundschuh M, Backhaus T. Pesticide mixtures in the Swedish streams: Environmental risks, contributions of individual compounds and consequences of single-substance oriented risk mitigation. *The Science of the total environment*. 2017;598;973-983. DOI:10.1016/j.scitotenv.2017.04.122.

48. Sarigiannis and Hansen. Considering the cumulative risk of mixtures of chemicals – A challenge for policy makers. *Environmental Health* 2012, 11(Suppl 1):S18. <http://www.ehjournal.net/content/11/S1/S18>.

49. Carvalho RN, Arukwe A, Ait-Aissa S et al. Mixtures of chemical pollutants at European legislation safety concentrations: how safe are they? *Toxicological sciences : an official journal of the Society of Toxicology*. 2014; 141(1);218-33. DOI:10.1093/toxsci/kfu118.

50. Nevison CD. A comparison of temporal trends in United States autism prevalence to trends in suspected environmental factors. *Environmental health : a global access science source*. 2014;13(73);1-16. DOI:10.1186/1476-069X-13-73.

51. EPA - Toxic Substances Control Act inventory. <https://www.epa.gov/tsca-inventory/about-tsca-chemical-substance-inventory>

52. Kostoff, RN. Pervasive Causes of Disease. Georgia Institute of Technology. 2015. PDF. < <http://hdl.handle.net/1853/53714> >

53. Kostoff RN, Goumenou M, Tsatsakis A. The role of toxic stimuli combinations in determining safe exposure limits. *Toxicology Reports* 2018;5;1169-1172. DOI:10.1016/j.toxrep.2018.10.010

54. Kostoff RN. Under-reporting of adverse events in the biomedical literature. *Journal of Data and Information Science*. 2016. 1:4. 10-32. DOI: 10.20309/jdis.201623.

http://manu47.magtech.com.cn/Jwk3_jdis/EN/article/searchArticleResult.do#1

55. Kostoff RN, Patel U. Literature-related discovery and innovation: Chronic kidney disease, *Technol. Forecast. Soc. Change*. <http://dx.doi.org/10.1016/j.techfore.2014.09.013>. 2014.

56. Kostoff RN, Porter AL, Buchtel HA. Prevention and reversal of Alzheimer's disease: treatment protocol. Georgia Institute of Technology. 2018. PDF. <https://smartech.gatech.edu/handle/1853/59311>.

57. Calabrese EJ, Agathokleous E, Kozumbo WJ, Stanek EJ, Leonard D. Estimating the range of the maximum hormetic stimulatory response. *Environmental Research*. 2019;170:337-343

Chapter 5. Appendices

Appendix 1 - Numbers of Combinations of Potentially Toxic Stimuli

The reason few combinations (relative to single stressors) are selected for study derives from combinatorics. Consider the number of possible combinations of two and three items. For n variables, and possible combinations of a subset of n consisting of r variables, the number of combinations is: $C(n,r)=n!/(r!(n-r)!)$, where $[\!]$ denotes the factorial function. For large n , and r small compared to n , $C(n,r)\sim n^r/r!$ For large n , C becomes a large number. How large? Consider the following, using radiofrequency radiation (RFR) as an example.

It would be useful to identify comprehensively those substances that could combine with RFR to produce enhanced adverse health effects. There are many tens of thousands of items that could be potential candidates for study. Is there any way to narrow those down?

The eBook 'Pervasive Causes of Disease' [52] examined contributing factors to ~4,000 diseases, and identified factors that contributed to 1) any of these diseases and 2) a threshold number of diseases. There were about 8,000 causes identified for the ~4,000 diseases. On the order of 800 substances that contributed to at least a threshold number of the ~4,000 diseases were identified, and were labeled pervasive causes because of their widespread impact. The total number of causes identified for all diseases (~8,000) might be a good starting point for identifying additional potential RFR combinations. Why is this a reasonable assumption?

The various systems in the body are inter-related. The immune system, neural system, endocrine system, circulatory system, etc, are linked. There are research disciplines devoted to study of these linked systems (e.g., neuroimmunology, neuroimmunoendocrinology, etc). Most of the ~8,000 causes impact one or more of these inter-related systems. Many of the studies focus on the impact of the test substance on (typically) one system only. It would be reasonable to expect that a substance impacting one of the systems above would have some level of impact on the other systems above, with some impacts being more significant than others.

Thus, the ~8,000 potential causes would be candidates for evaluation as RFR partners. However, many of these ~8,000 potential contributing factors are relatively rare in the existing biomedical literature. Their rarity may be because 1) they are 'weak' contributing factors, 2) they have not yet been studied for many diseases, or 3) their adverse effects may have been suppressed from publication by the sponsor or journal.

First, two sub-sets of the 8,000 potential causes will be examined. Assume the top 1,000 contributing factors are reasonably important (essentially those deemed 'pervasive' in [52]), and assume the top 100 contributing factors are quite important. How many experiments would be required to examine comprehensively their potential damage enhancements in concert with RFR?

1. 1000 contributing factors as possible RFR partners

If all possible combinations of the 1000 contributing factors were partnered with RFR, there would be 1000! [factorial] experiments required. The number is essentially infinite. We will instead examine combinations starting at the other end of the combinatorial spectrum.

For potential damage enhancements of RFR combined with one other contributing factor, 1000 experiments would be required to cover all 1000 contributing factors. And, each experiment would be more complex than an experiment for each component in isolation. For example, suppose four values were selected for each variable. In the simplest illustrative case, the isolated experiment would require four runs for each variable (eight runs total). In the combination experiment, sixteen runs total would be required.

For potential damage enhancements of RFR and two other contributing factors (a three component combination), ~500,000 experiments would be required (according to the approximate formula above). An online calculator gives the exact number as 499,500, so the approximation is quite reasonable.

For potential damage enhancements of RFR and three other contributing factors (a four component combination), 166,167,000 experiments would be required. Given the cost and time of these types of experiments, the number of two,

three, or four component experiments required to cover all 1000 possibilities is completely unrealistic.

2. 100 contributing factors as possible RFR partners

For potential damage enhancements of RFR combined with one other contributing factor, 100 experiments would be required to cover all 100 contributing factors. For potential damage enhancements of RFR and two other contributing factors (a three component combination), 4,950 experiments would be required. For potential damage enhancements of RFR and three other contributing factors (a four component combination), 161,700 experiments would be required. Even RFR and one other contributing factor require a large number of experiments, and the two and three other contributing factor scenarios are again completely unrealistic in terms of number of experiments and available resources required.

3. 10 contributing factors as possible RFR partners

Consider the additional case of combinations of ten contributing factors with RFR. For potential damage enhancements of RFR and one other contributing factor, 10 experiments would be required to cover all 10 contributing factors. For potential damage enhancements of RFR and two other contributing factors (a three component combination), 45 experiments would be required. For potential damage enhancements of RFR and three other contributing factors (a four component combination), 120 experiments would be required. While these numbers are still huge, based on the experience of past RFR experiments, they are not out of the realm of possibility.

Appendix 2 - Combining Hormetic Exposures

One definition of hormesis, or the hormetic dose response, is: "a biphasic dose response characterized by stimulatory low doses and inhibitory (toxic) doses." [57]. Obtaining a hormetic effect from multiple stimuli may be dependent on many variables, including the time between applications of the individual stimuli [57]. As stated in [57]: "To estimate a "true" MHSR [maximal hormetic stimulatory response], it is also necessary to measure the MHSR at an optimal time following the administration of any treatment dose. A certain amount of time is biologically required to sense a stimulus, to transmit and process information about a stimulus, and to organize and execute an adaptive response to a stimulus. Simply put, if the duration between a stimulus and the measurement of a response to that stimulus is either too short or too long then the temporal window that is required for the expression and measurement of an optimal response will be either completely or partially missed, resulting in no response or, possibly a response significantly less than a "true" MHSR."

If multiple substances that have hormetic dose responses individually are provided in parallel (which could include application times spaced too closely in order for hormetic effects to be observed), then under certain conditions the hormetic effects could be negated, or even transformed into adverse effects.

For example, assume:

- five substances that exhibit hormetic dose responses individually;
- each of these five substances has the same mode of action, and produces the same end results;
- each substance has the same NOAEL, and that hormesis is produced individually at the same fractional NOAEL level, e.g., $0.4 \times \text{NOAEL}$.

Then, administering the five substances in parallel at the $0.4 \times \text{NOAEL}$ level for each, or sufficiently close temporally that hormetic effects do not have the time to emerge, would result in an effective dose of $2.0 \times \text{NOAEL}$. This would lead to adverse effects, since the NOAEL threshold has been exceeded.

Thus, the contribution of individual substance hormesis to total mixture hormesis will be a function of many variables, especially the temporal trajectory of toxic stimuli exposures, and the similarities among their hormetic modes of action.

Appendix 3 - Potential Contributing Factors to AD

DETAILED AD FOUNDATIONAL CAUSES

(adapted from reference [56])

2-7A. Taxonomy of AD Causes

[Table 2-7A](#) presents a detailed taxonomy of AD foundational causes.

Table 2-7A - Detailed Taxonomy of AD Foundational Causes

CODE	CATEGORY
I	LIFESTYLE
I-A	Diet
I-A1	Excesses
I-A2	Deficiencies
I-A3	Food Additives/Pollutants
I-B	Activity
I-B1	Sedentary Lifestyle
I-B2	Sleep
I-C	Substance Abuse
I-C1	Recreational Drugs
I-C2	Smoking
I-C3	Alcohol
I-D	Other
II	IATROGENIC
II-A	Drugs
II-A1	Anti-Neoplastic Agents
II-A2	Anti-Infective Agents
II-A2a	Anti-Bacterial/Anti-Fungal/Anti-Parasitical Agents
II-A2b	Anti-Viral/Anti-Retroviral Agents
II-A3	Anti-Inflammatory Agents
II-A4	Cardiovascular Agents
II-A5	Central Nervous System Agents
II-A5a	Analgesics and Pain Relievers
II-A5b	Movement Stabilizers
II-A5c	Depressants/Anti-Depressants and Stimulants

II-A5d	Mood Stabilizers
II-A6a	Immunosuppressive Agents/Immunosuppression
II-A6b	Immunostimulation Agents
II-A6b1	Vaccines/Vaccination
II-A7	Hematologic Agents
II-A7a	Coagulants
II-A7b	Anti-Coagulants
II-A7c	Other
II-A8	Steroids/Hormones
II-A9	Anti-Hypertensive Agents
II-A10	Gastrointestinal Agents
II-A11	Lipid Regulating Agents
II-A12	Dermatologic Agents
II-A13	Anti-Bone-Loss Agents
II-A14	Anti-Diabetic Agents
II-A15	Anti-Rheumatic Agents
II-A16	Anti-Allergic Agents
II-A17	Anti-Hypotensive Agents
II-A18	Anti-Thyroid Agents
II-B	Radiotherapy
II-C	Surgery/Invasive Treatments
II-C1	Transplantation
II-C2	CardioVascular
II-C3	Orthopedic
II-C4	Gastrointestinal
II-C5	Kidney/Urologic
II-C6	Brain/Neural
II-C7	Dental/Oral/Nose/Ear
II-C8	Gynecologic
II-C9	Respiratory/Thorax
II-C10	Liver/Spleen
II-C11	Ocular
II-C12	Breast
II-C13	Dermal/Tissue/Neck
II-C14	Thyroid
II-C15	Pancreas

II-C16	General
II-C17	Other
II-D	Diagnostic Agents/Procedures
II-D1	Contrast Media
II-D2	Radiation
II-D2a	Ionizing
II-D2b	Non-Ionizing
II-D3	Invasive
II-D4	Other
III	BIOTOXIC AGENTS
III-A	Mycotoxins
III-B	Exotoxins
III-C	Bacteria/Fungi/Parasites
III-D	Viruses
III-E	Other
IV	OCCUPATIONAL/ENVIRONMENTAL EXPOSURES
IV-A	Chemicals/Materials
IV-A1	Industrial/Household Chemicals/Materials
IV-A1a	Hydrocarbons
IV-A1b	Solvents
IV-A1c	Chemical Compounds
IV-A1d	Other
IV-A2	Agricultural Chemicals
IV-A3	Materials
IV-A3a	Heavy Metals
IV-A3b	Particulates
IV-A3c	Nanotechnology
IV-B	Physical/Mechanical
IV-B1	Electromagnetic Radiation
IV-B1a	Ionizing
IV-B1b	Non-Ionizing
IV-B1b1	Non-Visible
IV-B1b2	Visible
IV-B2	Sound
IV-B3	Temperature; Heat/Cold
IV-B4	Force/Pressure/Physical Trauma

IV-C	Other
V	PSYCHOSOCIAL/SOCIOECONOMIC
V-A	Psychological
V-B	Sociological
V-C	Economic
VI	GENETICS (Categories Only)
VI-A	Polymorphism/Genotypes/Haplotypes
VI-B	Mutations
VI-C	Linkages
VI-D	Risk Alleles
VI-E	Genotoxicity
VI-F	Familial
VI-G	Congenital

2-7B. Effects/Impacts from AD Foundational Causes

[Table 2-7B](#) presents a taxonomy of effects/impacts from the AD foundational causes. Its members will be used to identify potential links to effects/impacts of the foundational causes identified in the final results taxonomy of [Table 2-7C](#).

Table 2-7B - Taxonomy of Effects/Impacts from AD Foundational Causes
(adapted from reference [56])

CODE	LEVEL
	CELLULAR LEVEL
A1	increase neuroinflammation
A2	increase neurotoxicity
A3	increase neuronal death
A4	increase neurodegeneration
A5	induce DNA damage
A6	damage mitochondria
A7	increase neuronal oxidative stress
	BIOMARKER LEVEL
B1	increase tau pathology/neurofibrillary tangles
B2	increase Abeta generation
B3	increase AGEs
B4	increase insulin resistance
B5	reduce brain volume
B6	produce low testosterone
B7	produce tissue lesions
B8	induce synaptic/neurotransmission dysfunction
B9	induce hippocampal damage
B10	induce olfactory dysfunction
B11	impair glutamate uptake
B12	compromise BBB integrity
B13	impair glucose homeostasis
B14	impair metal homeostasis
	PERFORMANCE LEVEL
C1	increase memory loss
C2	increase seizures
C3	induce cognitive dysfunction
	DISEASE LEVEL
D1	increase AD risk
D2	increase diabetes risk
D3	induce hypothyroidism
D4	induce metabolic syndrome
D5	increase obesity

These effects/impacts are divided into four categories:

- Cellular Level,
- Biomarker Level,
- Performance Level,
- Disease Level.

Each lowest-level sub-category was obtained by inspecting visually many abstracts and titles of records that related cause to effect/impact, and extracting those effects mentioned multiple times.

The lowest-level sub-categories are not orthogonal; there is some partial overlap and redundancy. Much of this is due to the different less-than-precise language of the article authors themselves. For example, some authors may use neurotoxicity to refer to neural damage, others may use neuro-degeneration or neuronal death or

The value of incorporating the members of the above table in the final results is that it conveys (to the research community, the medical clinician community, and the consumer community) how the research is linked either

- 1) directly to AD, or indirectly to AD through
- 2) strong disease precursors of AD (e.g., diabetes), or
- 3) strong behavioral precursors of AD (e.g., cognitive decline), or
- 4) strong biomarker precursors of AD (e.g., increase tau hyperphosphorylation), or
- 5) strong cellular precursors of AD (e.g., increase neuronal death).

Why is this important?

Consider two potential foundational causes of AD identified in the present study, high-fat diets and wireless radiation. High-fat-diets have been studied for a long time, and there appears to be good evidence that such diets are strong contributors to AD. The long-term data are sufficient to conclude there is a direct link between high-fat diets and AD.

Wireless radiation at cell phone radiofrequencies or WiFi frequencies has been in commercial/military use for perhaps thirty years, and in wide-scale use for perhaps ten+ years. It might take 50-60 years to identify impacts of this segment of the radiation spectrum on the development of AD. We have a choice. We can wait many decades for the types of conclusive evidence that would satisfy the statisticians, or we can start to take precautions based on the impact of wireless radiation on surrogate endpoints/biomarkers/AD characteristics already demonstrated. This is the Precautionary Principle, and the results contained in [Table 2-7C](#) provide a starting point for implementation of the Precautionary Principle for prevention and reversal of AD.

2-7C. Specific Foundational Causes of AD

[Table 2-7C](#) shows the AD potential foundational causes in this detailed taxonomic structure. There are four columns listed. The first column on the left (CAT) is the foundational cause category as shown in [Table 2-7A](#). The next column is the foundational cause. To keep the volume of results manageable, in some cases only the cause in aggregate was shown, rather than listing all the members (e.g., vegetables). The third column is the effect(s) produced by the foundational cause, and the entry tags are those listed in [Table 2-7B](#). The fourth column contains relevant references that confirm the foundational cause.

In most cases, there were multiple papers linking each foundational cause listed either directly to AD or indirectly to one or more surrogate endpoints. Referencing every single relevant paper for every detailed foundational cause would have produced an overly voluminous unreadable table and write-up. In order to balance comprehensiveness with readability, multiple compromises were made.

First, one or two representative papers for each foundational cause were selected and referenced. Second, foundational causes that had relatively minor differences were aggregated. Some were listed separately under a categorical heading, and others were subsumed within the heading. Third, the effects/impacts of the foundational causes were extracted from at least the papers referenced, and sometimes from other relevant papers that were not selected for referencing. Thus, the effects/impacts shown for any potential cause should be viewed as a "floor" of all potential effects, not a "ceiling".

It should also be noted that all the effects/impacts were derived from papers whose central theme was AD/dementia, because of the criteria used to extract these records from Medline. So, a foundational cause that, e.g., "damaged mitochondria" (A6) did so within the overall context of relating to AD or dementia. If the four different levels shown, and the items contained in each level, are viewed as potential "pathways" to AD, then conventional wisdom implies that the more pathways impacted by a potential contributing factor, the greater likelihood that factor would be an important "cause" of AD. However, not only are the numbers of pathways impacted important, but the strength of the contributing factor's impact on each pathway is important. This strength of impact is not shown in the table, reflecting its ambiguity in the literature.

The foundational causes identified are at different levels of importance to AD, and are at different levels of verification/validation. In the Medline literature examined, some foundational causes were identified through:

- 1) in vitro cell or tissue tests;
- 2) animal experiments;
- 3) epidemiological studies;
- 4) individual case studies; and,
- 5) trials with large numbers of subjects.

Conventional wisdom implies that those foundational causes associated with large numbers of papers published and large numbers of test subjects would have greater credibility. However, as shown in [2-3], there may be (many) important foundational causes being withheld from the literature deliberately, so numbers of papers is not a definitive metric for credibility.

Table 2-7C - Foundational Causes of AD

(adapted from reference [56])

CAT	CAUSE	EFFECTS	REF
I	<u>LIFESTYLE</u>		
I-A	DIET		
I-A1	EXCESSES		
	High Fat Diet -saturated fat -dairy fat -trans-unsaturated fat -hydrogenated fat -omega-6 PUFAs -n-6/n-3 ratio -maternal high fat diet	A2, B1, B2, C1, C3, D1, D4, D5	[3-12]
	Diabetogenic diet	B2	[13]
	High calorie diet	A1, B1, B12, C3, D1, D5	[14-16]
	High salt diet	B2, C3, D1	[17]
	High carbohydrate diet -refined carbohydrates -sugars (fructose/sucrose/glucose/D-galactose) -gluten -high glycemic index diet	A1, A3, A4, A7, B2, B4, B11, B12, B13, C1, C3, D1, D2	[18-25]
	High advanced glycation end products diet -high temperature food heating -food irradiation -high glucose -high nutrient-bound AGEs -animal foods high in fat and protein	A6, A7, B1, B2, B3, C1, C3, D1, D2	[26-31]
	High cholesterol diet	A1, A4	[32]
	High iron diet -high red meat -high processed meat	A1, C3, D1	[33-35]
	High meat diet	D1	[36]
	High arachidonic acid	B1	[37]
	High methionine diet	A1, A2, A7, B1, B8, B2,	[38-40]

		C1, C3	
	High copper diet	C3, D1	[35, 41]
	High zinc	A3, A7, B1, B2	[42-43]
	High pickle diet	D1	[44]
	High unfermented soy	D1	[45]
I-A2	DEFICIENCIES		
	Vitamin B deficiency -myriad B-Vitamin deficiency -B2/B6/B12 deficiency -folate/folic acid deficiency -thiamine deficiency	A3, A4, A6, A7, B1, B2, C1, C3	[46-49]
	Vitamin C deficiency	A7, C2	[50]
	Vitamin D deficiency	A1, A4, A6, B1, B2, B5, B8, C3, D1	[51-52]
	Vitamin E deficiency	D1	[53]
	Vitamin K deficiency -fluindone	C3	[54]
	Potassium deficiency	A1, A3, A7, B1, B2, C3	[55-56]
	Iron deficiency	C3	[57]
	Zinc deficiency	A3, C3, D1	[58]
	Magnesium deficiency	C3	[59]
	Calcium deficiency	A3, A7	[60]
	Selenium deficiency	B2	[61]
	Starvation	B2	[62]
	Dehydration	B5, D1, D2, D5	[63]
	Malnutrition	D1	[64]
	Early life nutrient restriction	B2, D1	[65]
	Glucose deprivation	A3, B1, B2	[66]
	Glutathione depletion	A1, A2, A4	[67]
	Linoleic acid deficiency	A4, D1	[68]
	Low docosahexaenoic acid	A3	[53]
	Low tryptophan diet	B2	[69]
	Nondrinkers	C3, D1	[70]

	Low cocoa	A1, A7, C3	[71]
	Low coffee	C3, D1	[72]
	Low flavonoids/flavanols: acacetin, aminogenistein, apigenin, kaempferol, 7,8-Dihydroxyflavone, anthocyanins, atriplex laciniata L, blueberries, Curcumin, cyanidin, datiscetin, delphinidin, EGCG, epicatechin, Epimedium brevicornum, fisetin, genistein, Ginkgo, glycitein, icariin, isoscutellarein 7-O-[6"-O- acetyl-beta-D-allopyranosyl-(12)]-beta-D- glucopyranoside, isovitexin, morin, myricetin, Nobiletin, pelargonidin, phloridzin, rutin, salvigenin, Scutellaria baicalensis Georgi, Sideritis flavonoids, vitexin, xanthomicrol, luteolin, morin, PD98059, quercetin, taxifolin, β - naphthoflavone	A1, A7, B2, C3, D1	[71, 73-74]
	Low fruit: low: blackberries, blueberries, strawberries, raspberries, cherries, oranges, plums, prunes, red grapes, pomegranates, date palm fruits	A7, B2, B3, B13, C1, C3, D1	[21, 75-76]
	Low vegetables -cruciferous -dark and green leafy	A7, B13, C3, D1	[8]
	Low fatty fish	B2, C3, D1	[77]
I-A3	FOOD ADDITIVES/POLLUTANTS		
	Industrialized/preserved food	D1	[78]
	Monosodium glutamate	A2, A3, B2, B9	[79]
	Menadione	A3, A7	[80]
	Cysteine	A7	[81]
	Diacetyl	A2, B2	[82]
I-B	ACTIVITY		
I-B1	SEDENTARY LIFESTYLE		
	Physical inactivity/low daily gardening, walking	A6, A7, D1	[83-84]
	Chronic immobilization stress	A4, B1, B2, B9, C3	[85]

	Cognitive inactivity	D1	[86]
	Lack of exercise	D1, D2	[23]
	Low cardiovascular fitness	D1	[87]
I-B2	SLEEP		
	Sleep deprivation	C3, D1	[20, 88]
	Circadian disruption	C1, C3	[89-90]
I-C	SUBSTANCE ABUSE		
I-C1	RECREATIONAL DRUGS		
	Amphetamine	C3	[91]
	3,4-Methylenedioxyamphetamine; MDMA; Ecstasy	A2, A7, B1, C1, C3	[92]
	Cocaine/opiates	A2, A4	[93-94]
	Phencyclidine	C3	[95]
I-C2	SMOKING		
	Tobacco smoke	A4	[96]
	Ethanol/excess alcohol	A7, B9, C1, C3, D1	[97]
II	<u>IATROGENIC</u>		
II-A	DRUGS		
II-A1	ANTI-NEOPLASTIC AGENTS		
	Chemotherapy	A2, A4, B9	[98]
	Chemical castration	C3	[99]
	Camptothecin	A2, A3	[100]
	Epoxomicin	A3, A6	[101]
	Staurosporine/Etoposide	A3, A4	[102-103]
	Methylmethane sulfonate	A5	[104]
	Paclitaxel/Doxorubicin	A3, A4, B1	[105]
	Doxycyclin	B2	[106]
	Cyclophosphamide/cytosphosphane	A2, A7	[107]
	Letrozole	B9, C1	[108]
	Methotrexate	B9, C1, C3	[109]
	Choline mustard Az/Nitrogen mustard	B9, C1	[110]
	Anastrozole	B2, B9	[111]
	d,l-buthionine-S,R-sulfoximine/BSO	A3, A6, A7, B14	[112]
	Fostriecin/Fos	B1	[113]

	carbobenzoxy-Leu-Leu-leucinal/MG132	A2, A4	[114]
	Streptozocin	B14, D1	[115]
II-A2	ANTI-INFECTIVE AGENTS		
	Chloroquine(CQ); CQ; lysosomotropic agent	B2	[116]
	Ionomycin	A6, B2	[117]
II-A3	ANTI-INFLAMMATORY AGENTS		
	colchicine	A1, A4, C1, D1	[118]
II-A4	CARDIOVASCULAR AGENTS		
	isoproterenol	B1, C1	[119]
	atropine	B2	[120]
	D-ribose	A3, B1, B3	[121]
	Muscarinic receptor antagonists	C1, C3	[122]
II-A5	CENTRAL NERVOUS SYSTEM AGENTS		
II-A5a	Analgesics and Pain Relievers		
	Anesthetics/Opioids -acetaminophen -barbital -barbitone -desflurane -dexmedetomidine -diethylbarbituric acid -diethylmalonyl urea -enflurane -halothane -isoflurane -ketamine -medinal -morphine -nitrous oxide -pentobarbital -propofol -psychotropic drugs -sevoflurane -sodium diethylbarbiturate -veronal	A2, A3, A4, A6, B1, B2, B9, C1, C3, D1	[123-129]

II-A5b	Movement Stabilizers		
	Anticholinergic medications -doxepin -chlorpheniramine -oxybutynin -trihexyphenidyl -propiverine -L-DOPA/dopamine	A3, A7, B1, C3, D1	[130-132]
II-A5C	Depressants/Anti-Depressants and Stimulants		
	selective serotonin re-uptake inhibitors	D1	[133]
	benzodiazepine	D1	[134]
	dizocilpine	C1, C3	[135]
	3-quinuclidinyl benzilate	C3	[136]
II-A5d	Mood Stabilizers		
	-clozapine -methyllitycaconitine -dihydro-beta-erythrodine	C1, C3	[137]
	anisomycin	A7, B2	[138]
II-A6	IMMUNE SYSTEM AGENTS		
II-A6a	Immunosuppressive Agents/ Immunosuppression		
	Cyclosporin	B1, C1	[139]
II-A6b	Immunostimulation Agents		
	polyinosinic:polycytidylic acid	B2, C3	[140]
II-A7	Hematologic Agents		
II-A7b	Anti-Coagulants		
	Sulfated glycosaminoglycans -heparin/heparan sulfate -dextran sulfate -pentosan polysulfate -chondroitin sulfate -dermatan sulfate	B1	[141]
II-	Other		

A7c			
	mitochondrial toxins -1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine/MPTP	A1, A3, A6, A7	[142]
II-A8	Steroids/Hormones		
	Corticosteroids -methylprednisolone -dexamethasone	A1, A3, A4, B1, B5	[143-145]
	Anabolic androgenic steroids -nandrolone -stanozolol	B8, B9, C1, C3	[146]
	Corticosterone	B1, B2, C3	[147]
	Wortmannin	A7, B1	[148]
	17beta-trenbolone	A3, A4, B2	[149]
	Salmon calcitonin	B2	[150]
	Human chorionic gonadotropin	B2	[151-152]
	Corticotrophin releasing factor	B2	[153]
	Sex steroid hormones -transient testosterone treatment -flutamide	B2	[154]
	U18666A	A3, A7, B2	[155]
	Allopregnanolone	B9, C1, C3	[156]
	Medroxy-progesterone acetate	C3, D1	[157]
	Androgen deprivation therapy	D1	[158]
	Postmenopausal hormone therapy	C3	[159]
	Testosterone depletion	A1, D1, D2	[160]
	Leptin deficiency	B1	[161]
	Prenatal sex hormone exposure	D1	[162]
II-A9	ANTI-HYPERTENSIVE AGENTS		
	ACE inhibitor	D1	[163]
	ICI 118,551/Selective beta2AR antagonist	B1, B2, C3	[164]
	Telmisartan/Olmesartan	B2	[165]
	Mecamylamine	C3	[166]
II-A10	GASTROINTESTINAL AGENTS		
	Thiorphan/Phosphoramidon	B2	[167]
	Proton pump inhibitors	B2, D1	[168-

	-omeprazole -pantoprazole -lansoprazole -esomeprazole -rabeprazole		169]
II-A13	ANTI-BONE-LOSS AGENTS		
	PGE2	B2	[170]
II-A14	ANTI-DIABETIC AGENTS		
	Intralipid and insulin	B2	[171]
	Metformin	B2	[172]
II-A16	ANTI-ALLERGIC AGENTS		
	Anticholinergics -first-generation antihistamines -tricyclic antidepressants -bladder antimuscarinics	D1	[173]
II-A18	ANTI-THYROID AGENTS		
	Propylthiouracyl	A1, B1, B2, B5, B8, C1	[174]
II-A19	Other		
	Carbachol	B8, B14	[175]
	MDL72974/Mofegiline	A3, A7	[176]
	Pilocarpine	A3, B1, B2	[177]
	Clenbuterol hydrochloride	B2	[178]
	Semagacestat	C3	[179]
II-B	RADIOTHERAPY		
	Head radiotherapy	C3, D1	[180-181]
II-C	SURGERY/ INVASIVE TREATMENTS		
II-C1	TRANSPLANTATION		
	Liver transplant	B2, C3	[182]
II-C2	CARDIOVASCULAR		
	Cardiac surgery/bypass	A1, B1, B2, C3	[183-185]

II-C5	KIDNEY/UROLOGIC		
	Dialysis	C1, C3	[186-187]
	Gonadectomy	B2	[188]
II-C7	DENTAL/ORAL/NOSE/EAR		
	Olfactory bullectomy	A4, A6, A7, B2, C1	[189-190]
	Occlusal disharmony	B2	[191]
II-C8	GYNECOLOGIC		
	Hysterectomy/oophorectomy	C3	[192]
	Premature surgical menopause/Premature ovarian failure	C3	[193]
II-C17	OTHER		
	Axotomy	A3, A7	[194]
	Cerebral artery occlusion	A3, A4, A7, B8, C1, C3	[195-198]
	Intermittent hypoxia/ischemia	A3, A4, A7, B2, B12, C1, C3	[199-202]
	Brain embolism	A4, B1, B2, C1, C3	[203-204]
	Aortic coarctation	A1, B2	[205]
	Forebrain lesions	C1, C3	[206-207]
	Adrenalectomy	B2	[208]
	Pituitary hormone injections with Abeta	B2	[209]
	Abdominal surgery	B2, C3	[210]
III	<u>BIOTOXIC AGENTS</u>		
III-A	MYCOTOXINS		
	Mycotoxins -ochratoxin A/OTA -Fumonisin B1/FB1 -macrocyclic trichothecenes	A2, A3, A4, A7, B1, C1, C3, D1	[211-214]
	3-nitropropionic acid	A6	[215]
III-B	EXOTOXINS		
	Excitotoxins -kainic acid/ kainate	A1, A2, A3, A4, B9, C1,	[216-220]

	-quisqualic acid -ibotenic acid -domoic acid -quinolinic acid/quinolinate	C2, C3,	
	Phosphatase inhibitor -okadaic acid	B1	[221]
	Excitatory amino acids	D1	[222]
	Malonate	B9	[223]
	Annonaceaeous acetogenins	A2, D1	[224]
	Cyanobacteria -beta-N-methylamino-L-alanine/BMAA -saxitoxin -anatoxin-a -blue-green algae -microcystin	A2, B1, B2, B14	[225- 228]
	Diphtheria toxin	B2	[229]
	Pseudomonas aeruginosa exotoxin Y	B1, B12	[230]
	Saporin -192 IgG-saporin -p75-saporin	B1, B2, B13, C3	[231- 233]
	Cycad plant -cycasin/methylazoxymethanol	A2, A4, A5	[234]
	Glutamate/Glutamine synthetase	A2, A3, A4, A6, B2	[235- 237]
	Mitochondrial inhibitors -rotenone -3-NPA -antimycin -KCN -oligomycin	A6	[238]
III-C	BACTERIA/FUNGI/PARASITES		
	Bacteria/bacterial infections -bacterial endotoxins -bacterial lipopolysaccharide -gram-negative bacterium -spirochetes -Chlamydothyla pneumoniae -Helicobacter pylori -Escherichia coli	A1, A4, A7, B1, B2, B3, C3, D1	[239- 253]

<ul style="list-style-type: none"> -Treponema pallidum -Tannerella forsythia -Treponema denticola -T. socranskii -T. pectinovorum -T. medium -T. amylovorum -T. maltophilum -Fusobacterium nucleatum -Prevotella intermedia -Chlamydia pneumoniae -Porphyromonas gingivalis -propionibacterium acnes -Treponemas -T. lecithinolyticum -Borrelia burgdorferi <p>Fungi/fungal infection</p> <ul style="list-style-type: none"> -Cryptococcus -Coccidioides -Aspergillus -Histoplasma -Blastomyces -C. famata -C. parapsilosis -C. glabrata -C. krusei -Candida albicans -Candida ortholopsis -Candida tropicalis -Cladosporium -Malassezia globosa -Malassezia restricta -Neosartorya hiratsukae -Phoma -Sacharomyces cerevisiae -Sclerotinia borealis <p>Parasites</p> <ul style="list-style-type: none"> -Trypanosoma brucei rhodesiense -Trypanosoma brucei gambiense 		
---	--	--

	<ul style="list-style-type: none"> -Acanthamoeba -Balamuthia mandrillaris -Toxoplasma gondii -Taenia solium -Toxocara canis -T. cati -Toxocara ova -Leishmania amazonensis 		
III-D	VIRUSES		
	Viruses/Viral infections/Virulence factors Bornaviridae -Mammalian 1 bornavirus Bunyaviridae -Hantavirus -La Crosse encephalitis virus Coronaviridae -Human coronavirus OC43 -Murine hepatitis virus Flaviviridae -Hepatitis C virus -Japanese encephalitis virus -Murray Valley encephalitis virus -St. Louis encephalitis virus -West Nile virus Hepadnaviridae -Hepatitis B virus Herpesviridae -Cytomegalovirus -Epstein-Barr virus -Herpes simplex virus 1 -Human herpesvirus 6 Orthomyxoviridae -Influenza A virus (H1N1) -Influenza A virus (H3N2) -Influenza A virus (H5N1) Paramyxoviridae -Hendra virus -Measles virus Picornaviridae	A1, A3, A4, B1, B2, C3, D1	[254-260]

	-Enterovirus 71 -Theiler's murine encephalomyelitis virus Polyomaviridae -Simian 40 virus large T antigen Retroviridae -Human immunodeficiency virus 1 -Human T-cell leukemia virus -Moloney murine leukemia virus Rhabdoviridae -Chandipura virus Togaviridae -Chikungunya virus -Eastern equine encephalitis virus -Venezuelan equine encephalitis virus		
III-E	OTHER		
	Abeta -amyloid precursor protein -C31 -CT105 -Curli fibrils	A1, A2, A3, A4, A6, B2, B8, B14, C1, C3	[261-271]
	Homocysteine/3-Mercaptopropionic Acid	B8, B12, C1	[272-273]
	Lipopolysaccharide	A7, B3, C1	[274]
	Prions/Prion protein fragment	A2, A3, B14	[275-277]
	Cytokines -CXCL10 -IL-1 beta -IL-10 -interferon-alpha -interferon-gamma -interleukin-6 -interleukin-18 -interleukin-8 -TNF-alpha	A1, A2, A3, A4, B1, B2, B9, C1, C3	[278-288]
	Lipoperoxydation proteins -advanced lipoperoxydation products -oxidized low density lipoprotein	A1, A2, A3	[289-290]
	Trophic factor withdrawal	A3, A4, B2	[291-

			293]
	Amylin	A1, A2, A4, A6, A7	[294]
	Lysophosphatidic acid	B2	[295]
	S100B	A1, B1, B2	[296]
	3-hydroxykynurenine/3-hydroxyanthranilic acid	A4, A7, B2	[297]
	Abscisic acid	A1	[298]
	Phorbol myristate acetate	A1	[298]
	Acid phosphatase	D1	[299]
	2-deoxy-D-glucose	B2	[300]
	3-methylindole/Skatole	B10	[301]
	alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid/AMPA	A2	[302]
	Asymmetric dimethylarginine	A2, A7, B2, C3	[303-304]
	Dolichyl phosphate	B12	[305]
	N-(2-chloroethyl)-N-ethyl-bromo-benzylamine/dsp4	A1, A3, A4, B2, B13, C1	[306]
	Galanin	C1, C3	[307]
	GW4869/hydrochloride hydrate	B2	[308]
	Cottonseed	B1, B2	[309]
	Homocysteic acid/Homocysteate	A3, A7	[310]
	Isoprostane	B2	[311]
	Lysophosphatidylcholine	A2, A3, A7, B2	[312]
	Saturated non-esterified fatty acids	B2	[313]
	Palmitic acid	A3, C3	[314]
	Oncostatin M	A2, B11	[315]
	S100A9	A1, B2, C3	[316]
	Salsolinol	A2, A3	[317]
	Sulfatide	A3	[318]
	Brefeldin A	A3, A6, A7	[319]
	Thapsigargin	A3, A6, A7	[319]
	GF-109203X	B1	[320]
	Isopropyl-1-beta-D-thiogalactopyranoside	A3, A6, B1	[321]
	C2-ceramide	A3, A7	[322]
	dl-threo-1-phenyl-2-decanoylamino-3-	B2	[323]

	morpholino-1-propanol/PDMP		
	(1S,2R-d-erythro-2-N-myristoylamino)-1-phenyl-1-propanol/DMAPP	B2	[323]
	alpha7 nAChR subunit alpha7(1-208)	A1, B2, C3	[324]
	Adenosine triphosphate/ATP	B1	[325]
	Recombinant BiP/GRP78	B2	[326]
	Bradykinin	B1, B14	[327]
	CD40/CD40L	B2	[328]
	Collagen	B2	[329]
	Cyclic dipeptides	A3	[330]
	D-serine	A7	[331]
	Elastase	A7, B1	[332]
	4-Hydroxyhexenal/HHE	A3, B11, B13	[333]
	High-mobility group box-1/HMGB1	C3	[334]
	Exogenous amyloidogenic proteins -casein -fibroin -sericin -actin -islet amyloid polypeptide	B2	[335]
	Leukotrienes -Leukotriene B4/LTB4 -Leukotriene D4/LTD4	A1, B2, C1	[336-337]
	Myostatin precursor protein	B2	[338]
	N-acetylcholinesterase	A3, B1	[339]
	Secreted phospholipase A2-IIA/sPLA2-IIA	A1	[340]
	Spermine	A2	[341]
	Xanthine oxidase	A3, A7	[342]
	3-hydroxykynurenine/3-HK	A2, A3, A6	[343]
	Mitochondrial lysates	A1	[344]
	Phytohemagglutinin	A3, B14	[345]
	Angiotensin II	B1, B2, C3	[346]
	3beta-hydroxy-5-oxo-5,6-secocholestan-6-al/ ChSeco	A2, A3, A7, B2	[347]
	Cholesterol oxidation products/oxysterols -27-hydroxycholesterol/27-OHC -24-OH -7beta-hydroxycholesterol	A1, A2, A7	[348-349]

	-7-ketocholesterol -5,6-alpha cholesterol epoxide -5,6-beta cholesterol epoxide -cholesterol triol -lathosterol -beta cholesterol epoxide -cholesterol triol		
	Calyculin A	A2, A7, B1	[350]
	Chromogranin A	A1	[351]
	Forskolin	B1	[352]
	N-methyl-D-aspartate	A3, B9	[353]
	PGJ2	A1, A3, B1	[354-355]
	Quisqualate	A3, B9, C2	[356]
	Tunicamycin	A3, B14	[357]
	2-chloro-2'-deoxyadenosine/2-CDA/ cladribine	B2, C3	[358]
	N-acetylglucosamine	A2, B8, B9	[359]
	Cholinesterase -acetylcholinesterase -butyrylcholinesterase	B2	[360]
	Glycogen synthase kinase 3-beta/GSK3beta	B1	[361]
	HMG-CoA reductase	D1	[362]
	Pam(3)CSK(4)	A1	[363]
	Superoxide dismutase deficiency	A1, A7, B1, B2, B3, C1	[364]
IV	<u>OCCUPATIONAL/ENVIRONMENTAL EXPOSURES</u>		
IV-A	CHEMICALS/MATERIALS		
IV-A1	INDUSTRIAL/HOUSEHOLD CHEMICALS/MATERIALS		
IV-A1a	Hydrocarbons		
	20-methylcholanthrene/methylcholanthrene	A1	[365]
IV-A1b	Solvents		
	Petroleum-based solvents -Mineral turpentine	D1	[366]

	-Diesel fuel -Fuel oil -Kerosene		
	Chlorinated solvents -Trichloroethylene -Perchloroethylene -Trichloroethane -Dichloromethane -Benzene	C3	[367]
	Dimethyl sulfoxide/DMSO	B1	[368]
	Organic solvents -Benzene -Toluene -Phenols -Alcohols -Ketones -Methylmethacrylate	D1	[369-370]
IV-A1c	Chemical Compounds		
	Neurotoxins -6-hydroxydopamine/6-OHDA -5,6-dihydroxytryptamine/5,6-DHT -5,7-dihydroxytryptamine/5,7-DHT	A3, A7	[371-372]
	Type-2 Alkenes/Reactive aldehydes -Acrolein -4-Hydroxynonenal/HNE -Acrylamide -Methyl glyoxal	A2, A3, A4, A7, B1, B2, B3, B8	[373-378]
	Nitrosamine/N-nitrosodiethylamine	A3, A4, B4, C3	[379]
	Adenosine, 3', 5'-cyclic monophosphate/cAMP	B2	[380]
	Carbon tetrachloride	A1, A4, A7, B4, B13	[381]
	Chemical warfare agents/nerve agents -organophosphates -soman -sarin -ethyl S-2-di-isopropylaminoethyl-	C1, C3	[382]

	phosphonothiolate -VX -tabun		
	Cyanide -Potassium cyanide -Sodium cyanide	A3, A7	[383-385]
	Formaldehyde	B1, C1	[386]
	Hydrogen Peroxide/H2O2	A2, A3, A6, A7	[387]
	Lipophilic chemicals -persistent organic pollutants -bisphenol A -phthalates -low molecular weight hydrocarbons -polynuclear aromatic hydrocarbons -endocrine disruptors	C3, D1	[388]
	Sulfur dioxide/ SO2	A2, B8, C3	[389]
	Phthalates -Di-(2-ethylhexyl)-phthalate/DEHP -mono-2-ethylhexyl phthalate/MEHP -DEHP metabolites	B1, B4, B14, C3	[390]
	Brominated flame retardants -hexabromocyclo-dodecane/HBCD -tetrabromobisphenol-A/TBBPA -decabromodiphenyl ether/DBDE -polybrominated diphenyl ethers/PBDEs	A2, A3, A6, A7, B2	[391-392]
	Ammonia	A1, B2, B8	[393-394]
	Hypochlorous acid/HOCl	A2, A6, B13	[395-396]
	Methanol	A3, B1, C1	[397]
	Peroxynitrite	B1	[398]
	Sodium azide	A3, B1, B2	[399]
	Acetaldehyde	A3, A7	[400]
	3-Bromopyruvate	B13, C3	[401]
	Vehicular emission oxides -nitrogen dioxide/NO2 -carbon monoxide/CO	C3, D1	[402]
	Sodium fluoride	C1, C3	[403]

	Membrane-mimicking detergents -sodium dodecyl sulfate -lithium dodecyl sulfate	B2	[404-405]
	Nitric oxide donors -sodium nitroprusside -DETA NONOate	B1	[406-407]
	Amorphous aluminosilicates	B2	[408]
	Sodium nitrite	A3, A4, B1, B2, B9, B11, C1	[409]
	Tert-butyl hydroperoxide/t-BHP	A3, A7	[410]
	Alloxan	B1, B2	[411]
	Ammonium chloride	A4, A6	[412]
	Anionic dyes -Congo Red -Thiazine Red -Thioflavin S	B1	[413]
	Aroclor 1254	A3	[414]
	Cobalt chloride	A2, A3, A6, A7, C1, C3	[415]
	Magnesium chloride	B2	[416]
	2,2'-azobis(2-methylpropionamidine) dihydrochloride/AAPH	A7	[417]
	Methylglyoxal/Glyoxal	A1, A2, A7, B12	[378, 418]
	Disuccinimidyl suberate	B2	[419]
	Naphthazarin/5,8-dihydroxy-1,4-naphthoquinone/5,8-dihydroxy-1,4-naphthalenedione	A7	[420]
	Pyriethamine	B1, B2, C1	[421]
	Pyrogallol	A3, A7	[422]
	Glyceraldehyde-3-phosphate/GAPDH	A3, A6, B2	[423]
IV-A1d	Other		
	Ethylcholine mustard aziridinium ion/AF64A	B8, C1	[424]
	1-methyl-4-phenylpyridinium ion	A2, A3, A6, A7	[425]
	2,2'-dithiodipyridine	B14	[426]

	Aftin-4	A7, B2, B8, C3	[427]
	Kaolin	B2	[428]
	Ozone	A3, A7, C1, C3	[429]
	2;3;7;8-tetrachlorodibenzo-p-dioxin	A2, D1	[430-431]
IV-A2	AGRICULTURAL CHEMICALS		
	Pesticides/Insecticides/Herbicides/Fungicides -Organochlorine Pesticides -Organophosphate Pesticides -2,4,5-trichlorophenoxyacetic acid -2,4-Dichlorophenoxyacetic Acid -Agent Orange -Aldrin -Alkylphenolpolyethoxylates -APEOs -Arsenic -Beta-hexachlorocyclohexane/beta-HCH -Bipyridyles -Carbamates -Carbofuran -Chlorfenvinphos -Chlorpyrifos/CPF -Cycloheximide -Cypermethrin -Deltamethrin -Dichlorodiphenyldichloroethylene/DDE -Dichlorodiphenyltrichloroethane/DDT -Dichlorodiphenyldichloroethane/DDD -Dieldrin -Dimethyl parathion -Endosulfan -Famoxadone -Fenamidone -Glyphosate -Hexachlorobenzene -Hexachlorocyclohexane/HCH	A1, A2, A3, A5, A6, A7, B1, B2, B11, B14, C1, C3, D1,	[391, 431-443]

	<ul style="list-style-type: none"> -Imidacloprid -Lindane -Maneb -Methamidophos -Methyl parathion -Neonicotinoids -Nonylphenol -Octylphenol -Paraquat -Parathion -Pyraclostrobin -Pyrethroids -Trans-nonachlor -Trichlorfon/TCF -Trifloxystrobin 		
IV-A3	MATERIALS		
IV-A3a	Heavy Metals		
	Heavy Metals -aluminum -arsenic -cadmium -calcium/Ca ₂ /CaCl -calcium ionophore/A-23187/calcimycin -cobalt -copper -iron -lead -manganese -mercury -methylmercury -selenium -tin -zinc	A1, A2, A3, A4, A6, A7, B1, B2, B14, D1	[391, 444-455]
IV-A3b	Particulates		
	Air pollution -fine/ultrafine particles	A1, A4, A7, B1, B2, D1	[456-458]

	-inhalable dust -surgical smoke		
IV-A3c	Nanotechnology		
	Nanoparticles -iron -titanium dioxide -CdSe quantum dots -diesel exhaust -alumina -manganese oxide -copper -silica/silicon dioxide -zinc oxide -silver -nickel	A1, A2, A3, A4, A7, B2, B8, B12; B14	[459-462]
IV-B	Physical/Mechanical		
IV-B1	Electromagnetic Radiation		
IV-B1a	Ionizing		
	Gamma radiation -dental X-ray -gamma rays	A3, B1	[463-464]
	Particle radiation - ⁵⁶ Fe-particle radiation -cosmic radiation -HZE particle radiation	B2, B8, B9, B12, C3	[465-466]
	Radionuclide pollutants -uranium -cesium -cobalt -radon	A7, C1, C3, D1	[467-468]
IV-B1b	Non-Ionizing		
IV-B1b1	Non-Visible		
	Electromagnetic fields -extremely low frequency/ELF-EMF	B1, B2, B8, B9, C1, C3,	469-473]

	-900 MHz/RFEMR -electromagnetic pulse/EMP -electroconvulsive shock/ECS -UV irradiation	D1	
IV-B1b2	Visible		
	photolysis of 1-(2-nitrophenyl)ethyl sulfate	B2	[474]
IV-B2	SOUND		
	Noise -chronic noise exposure -short-lasting impulse noise -ultrasound sonication	A1, A4, B2, B3, D1	[475-477]
IV-B3	TEMPERATURE; HEAT/COLD		
	Heat stress -heat shock -heating -hyperthermia	A6, A7, B1, B2	[478-481]
	Cold stress -cold water stress -cold water hypothermia	A3, B1, B2, C1, C3	[482]
IV-B4	Force/ Pressure/ Physical Trauma		
	Traumatic brain injury	A4, B2, B9, C1, C3, D1	[483-486]
	Head trauma -history of head trauma -closed head injury -axonal injury	A1, B1, B8, B9, C1, C3, D1	[487-490]
	Spinal cord injury	A1, A4, C3	[491]
	Mechanical stress -Valsalva maneuver -repetitive heavy lifting -repetitive strong cough -accumulated mechanical stress	A1, A3, B1, B2, D1	[492-493]
IV-C	OTHER		
	Oxygen alterations	A1, A3, A4,	[494-

	-hyperoxia -hypoxia	A7, B2, C3	495]
V	<u>PSYCHOSOCIAL/SOCIOECONOMIC</u>		
V-A	PSYCHOLOGICAL		
	Chronic stress -repeated stress -chronic mild stress -chronic psychological stress -multiple chronic stresses -behavioral stress -childhood trauma -bereavement -chronic restraint stress -high job stress -low level of job control	A4, A6, A7, B1, B2, B9, C1, C3, D1	[496- 503]
	Low mental activity -low cognitively engaging activity -low purposeful activities -low leisure activities/low hobbies --low music/drawing/meditation/reading/arts/ crafts	B5, C3, D1	[504- 507]
V-B	SOCIOLOGICAL		
	Social isolation -isolation -loneliness -living alone -unmarried -maternal separation -low social activity index -low social support at work -constricted life space	A3, B1, B2, B8, C1, C3, D1	[508- 513]
	Low education -illiteracy	D1	[514- 516]
V-C	ECONOMIC		
	Early life socioeconomic circumstances	C3	[517]

2-7C1. Analysis of Results in [Table 2-7C](#) (adapted from reference [56])

The findings in the Lifestyle, Iatrogenic, Biotoxic Agents, Occupational/Environmental Exposures, and Psychosocial/Socioeconomic categories will now be examined by sub-category. The sub-category alphanumerical headings correspond to those in [Table 2-7C](#).

I. Lifestyle

Lifestyle includes choices mainly under individual control, and is divided arbitrarily into Diet, Activity, Substance Abuse, Other.

I-A. Diet

Poor diet reflects the adverse effects of excesses and deficiencies of dietary components. It has been used to induce myriad diseases in test animals, and it was a critical disease factor from many epidemiological and case studies.

I-A1. Dietary Excesses

Dietary excesses include: high-fat; diabetogenic diet; high-calorie; high-salt; high-carbohydrate; high advanced glycation end products (AGEs); high-cholesterol; high-iron; high-meat; high arachidonic acid; high methionine; high copper; high zinc; high pickle diet; high unfermented soy; and high-temperature cooking that results in harmful products (e.g., AGEs, nitrosamines, polycyclic aromatic hydrocarbons, and acrylamides).

As [Table 2-7C](#) shows, high-fat diet (from the specific types of fat listed in the table) had impacts at the cellular, biomarker, performance, and disease categories listed in [Table 2-7B](#). These high-fat diets were 1) directly related to AD, 2) indirectly related to AD through their direct impact on other diseases directly related to AD (e.g., metabolic syndrome, diabetes), and 3) indirectly related to AD through their direct impact on the pre-disease surrogate endpoints directly related to AD. High-fats were also a key component of the diabetogenic diet listed in the table.

High-calorie and high-salt diets had both direct and indirect relationships to AD. High-carbohydrate diet, especially refined carbohydrates/sugars, also had full spectrum impacts. They also contributed to the diabetogenic diet.

High-AGEs, high-cholesterol, high-iron, and high-meat diets are intertwined, to a large extent. Meat tends to be high-cholesterol, high-iron, and, especially when cooked at high temperatures, associated with production of high AGEs. Most of the articles related to meat consumption and AD emphasized adverse effects. Unfortunately, in most of these meat studies, especially epidemiological studies on humans, there was no separation of confounding effects.

Most meat available to the American public comes from CAFO (confined animal feeding operations). These animals are raised confined in very close quarters. To reduce infections from such close confinement, animals are given antibiotics, and to increase growth more rapidly, animals are given synthetic growth hormones. Their feed is grain-based, not the grass they would have if pasture-raised. Would the dementia-related diseases associated with meat consumption in the articles be as copious and serious for pasture/grass-fed animals not raised under confined conditions, and not given antibiotics and synthetic growth hormones?

Most meat eaten is cooked, much of it at high temperatures, usually in the presence of endogenous and exogenous additional fats. High-temperature cooking, especially of animal foods that are high in protein and fat, results in substantial production of AGEs and other harmful substances (e.g., nitrosamines, polycyclic aromatic hydrocarbons, and acrylamides). How are the harmful effects of the cooking separated from the harmful effects of the meat? Separation was not evident in any papers examined. The bulk of the biomedical literature has not demonstrated that meat from 'organic' pasture-raised grass-fed animals not fed antibiotics and growth hormones and not cooked at high temperatures is equally harmful to CAFO meat consumed by the vast majority of the American public, and there is some evidence that a moderate amount of high-quality meat may be beneficial.

Finally, diets high in arachidonic acid, methionine, copper, zinc, pickles, and unfermented soy contribute directly or indirectly to the development of AD.

1A2. Dietary Deficiencies

Many deficiencies listed in the literature may be symptoms of metabolic problems, not foundational causes in the present sense. Thus, a Vitamin A deficiency may be caused by 1) insufficient Vitamin A intake (foundational cause), or 2) some metabolic problem that results in reduced Vitamin A levels (symptom).

Dietary deficiencies include **low**: vitamins, especially Vitamins B (B2, B6, B12, folate/folic acid, thiamine), C, D, E; minerals, especially potassium, iron, zinc, magnesium, calcium, selenium; calories (starvation, malnutrition, early life nutrient restriction); water (dehydration); glucose; glutathione; linoleic acid; docosahexaenoic acid; tryptophan; alcohol (nondrinkers); flavonoids/flavanols (cocoa, coffee, acacetin, aminogenistein, apigenin, kaempferol, 7,8-Dihydroxyflavone, anthocyanins, atriplex laciniata L, curcumin, cyanidin, datiscetin, delphinidin, EGCG, epicatechin, Epimedium brevicornum, fisetin, genistein, ginkgo, glycitein, icariin, isoscutellarein 7-O-[6'''-O-acetyl-beta-D-allopyranosyl-(12)]-beta-D-glucopyranoside, isovitexin, morin, myricetin, nobiletin, pelargonidin, phloridzin, rutin, salvigenin, Scutellaria baicalensis Georgi, Sideritis flavonoids, vitexin, xanthomicrol, luteolin, morin, PD98059, quercetin,

taxifolin, β -naphthoflavone); fruit (blackberries, blueberries, strawberries, raspberries, cherries, oranges, plums, prunes, red grapes, pomegranates, date palm fruits); vegetables, especially cruciferous, dark and green leafy; fatty fish.

A very clear message about the dietary contribution to AD can be extracted from the above picture of dietary excesses and deficiencies. From the macro perspective, the amounts of fat, salt, sugar, refined carbohydrates, calories, and meat need to be reduced strongly, along with high temperature cooking, and the amounts of vitamin and mineral-laden fruits, vegetables, and fatty fish need to be increased substantially to reduce the risk of AD and perhaps contribute to reversal of AD.

I-A3. Food Additives

Many food additives are accompanied by adverse effects, and these effects may be under-diagnosed and under-researched. Many of the excesses and deficiencies mentioned above are the result of substances being added to, or removed from, the fresh whole food.

Additives include preservatives, monosodium glutamate, menadione, cysteine, diacetylcysteine, and diacetyl. Depending on how one defines "food additives", those additives with the widest impacts tend to include the major items listed under excesses above, such as fat, sugar, and salt. These components are typically added to foods for taste enhancement, not nutritional improvement. The effects of these additives appear to be at the cellular and biomarker levels.

I-B. Activity

The main sub-categories of Activity are exercise, sedentary lifestyle, and sleep.

I-B1. Sedentary Lifestyle/Lack of Exercise

The sedentary lifestyle, including low exercise, low physical activity, low daily gardening, low walking, and chronic immobilization, was mentioned quite often, and cognitive inactivity also received some mention. The resultant low cardiovascular fitness was also emphasized.

Sleep

Circadian disruption and poor sleep/sleep deprivation were also mentioned, although the main foundational components of poor sleep would be 1) choosing to sleep less or 2) not practicing good sleep-preparation habits. Other contributing factors to poor sleep, such as excessive pain, anxiety, etc, may be less under one's control, and are not regarded as foundational under the definition in the present monograph.

I-C. Substance Abuse

Substance abuse includes "recreational" drugs of all types (cocaine, methamphetamine, etc), other substances such as laxatives, common household products not usually identified as recreational drugs (such as mothballs), and

especially excessive cigarette smoking and alcohol. The main substance abuse contributing factors to AD for the present study were 1) recreational drugs (especially cocaine, amphetamines/3,4-Methylenedioxyamphetamine (MDMA - Ecstasy), phencyclidine, opioids) and 2) excessive smoking and alcohol. The bulk of the studies showed the recreational drugs' contributions to AD surrogate endpoints, such as neurodegeneration markers and cognitive dysfunction.

Potential Synergies

The individual AD foundational causes identified with Lifestyle are usually studied in isolation, and synergistic effects are typically not identified. Given the number of Lifestyle component combinations that could potentially be synergistic, and adding in

- 1) the foundational causes from the remaining categories (identified in Table 2-7C) to the potential combinations, and
- 2) potential foundational causes that surface only when operating in synergy but which have not yet been identified in [Table 2-7C](#) as individual foundational causes, it is clear that only the tip of AD foundational causes iceberg is being identified in this study.

II. Iatrogenic

Iatrogenic reflects diseases, symptoms, and injuries resulting from medical treatment, and is divided into four sub-categories: Drugs; Radiotherapy; Surgeries/ Invasive Procedures; Diagnostic Agents/Procedures. Iatrogenic is a substantial category, due mainly to the large numbers of drugs and surgeries that have side-effects and complications. The main categories, along with detailed drugs and surgeries, are presented in [Table 2-7C](#).

II-A. Drugs

While the drug categories have some overlap, each drug is listed in one category only in [Table 2-7C](#) for purposes of brevity when generating the drug categories. The more frequently a drug is used, or the more frequently surgery or invasive treatments are employed, the more opportunity for side-effects and complications, and the more opportunity for publications describing these side-effects and complications. This study does not provide an indication of how often such side-effects and complications would occur as a percentage of use.

There were eighteen major drug categories identified in [Table 2-7C](#), but only those with substantial entries will be discussed in this narrative. These include anti-neoplastic agents, cardiovascular agents, the massive category of central nervous system agents, hematologic agents, steroids/hormones, antihypertensive agents, and gastrointestinal agents.

What the table does not show is the effect of drug-drug combinations, or drug-other agent combinations. The effects of these combinations could be

important, but might not surface in some types of studies. A study on drug-drug combinations concluded that, of approximately 11,000 drug products on the US market, trillions of clinical trials would be required to provide an evidentiary basis of safety for all combinations of ten drugs [518]. Even for all combinations of three drugs, the number of clinical trials required to evaluate safety, or lack thereof, would be astronomical.

Thus, there are many ways that 1) a drug that has been shown to contribute to AD in isolation, when combined with two other drugs that have not been shown to contribute to AD in isolation, could in aggregate have a much stronger contribution to AD, and/or 2) three drugs that have been shown to have a modest contribution to AD in isolation, when combined, could in aggregate have a much stronger contribution to AD, and/or 3) three drugs that have been shown to have negligible contribution to AD in isolation, when combined, could in aggregate have a strong contribution to AD. Even if there are small numbers for any one combination of three drugs, when they are aggregated over the total number of potential combinations, this could add up to a large number of strong contributions. This effect might not surface in any epidemiological study because 1) it would fall beneath the statistical radar screen, 2) temporal variation in the combinations would be difficult to assess, and 3) the numbers of clinical trials required to assess the impact of drug combinations are astronomical and would be impractical. For combinations of drugs larger than three, which increase for people as they age [518], the numbers of combinations and clinical trials to demonstrate safety increase rapidly.

II-A1. Antineoplastic Agents

This is a powerful class of drugs, and they tend to exert toxic/destructive effects on cancer cells. It is therefore unsurprising that these drugs would result in surrogate endpoint effects such as neurotoxicity/neurodegeneration/apoptoses on some healthy cells as well. The types of impacts in [Table 2-7C](#) bear this out. Neurotoxic-type effects are seen for many of the agents, as well as the accompanying memory degradation, but direct links to AD are not reported as frequently. The old dictum "absence of evidence is not evidence of absence" should be a warning flag on drawing hard conclusions about direct links.

II-A4. Cardiovascular Agents

The impacts of the four agents/agent classes (isoproterenol, atropine, D-ribose, muscarinic receptor antagonists) presented in [Table 2-7C](#) concentrate on the surrogate endpoints, with emphasis on the biomarkers (increase tau, Abeta) and performance (decrease memory, cognition).

II-A5. Central Nervous System Agents

This was by far the largest category of potential contributors to AD. This should not be surprising, since the members of this category act on the central

nervous system (and some on the peripheral nervous system as well), and the brain is an integral part of the central nervous system. The impacts of the myriad contributing factors in this category differ somewhat by sub-category.

The analgesics and pain relievers (anesthetics/opioids) sub-category, consisting of acetaminophen, barbitol, barbitone, desflurane, dexmedetomidine, diethylbarbituric acid, diethylmalonyl urea, enflurane, halothane, isoflurane, ketamine, medinal, morphine, nitrous oxide, pentobarbital, propofol, psychotropic drugs, sevoflurane, sodium diethylbarbiturate, veronal, affected all four impact areas. There was a substantial literature on the AD-related impacts of these sub-category members. One analytic problem deriving from this observation is that the relationship between the types of surgery to AD is conflated with the relationship between the anesthetic to AD, and it is difficult to separate the two, since anesthetics are used almost universally in surgery, especially major surgery.

The movement stabilizer sub-category, consisting of the anticholinergic medications doxepin, chlorpheniramine, oxybutynin, trihexyphenidyl, propiverine, L-DOPA/dopamine, was less numerous in terms of publications than the anesthetic sub-category, but covered the four impact classes as well.

The depressant/antidepressant sub-category, consisting of selective serotonin re-uptake inhibitors, benzodiazepine, dizocilpine, and 3-quinuclidinyl benzilate, had impact on performance and AD in the references shown. The absence of impact at the cellular and biomarker levels could mean that these classes of impacts were not the objectives of the research that was conducted, or they were reported in other papers not presented here.

The mood stabilizer sub-category, consisting of clozapine, methyllycaconitine, dihydro-beta-erythrodine, and anisomycin, impacted across the surrogate endpoints.

II-A7. Hematologic Agents

The main component of this category is the anti-coagulant sub-category, consisting mainly of the sulfated glycosaminoglycans heparin/heparan sulfate, dextran sulfate, pentosan polysulfate, chondroitin sulfate, dermatan sulfate, and fluindione.

II-A8. Steroids/Hormones

The substances in this category include corticosteroids (methylprednisolone, dexamethasone), anabolic androgenic steroids (nandrolone, stanozolol), corticosterone, Wortmannin, 17beta-trenbolone, salmon calcitonin, human chorionic gonadotropin, corticotrophin releasing factor, sex steroid hormones (transient testosterone treatment, flutamide), U18666A, allopregnanolone, medroxy-progesterone acetate, androgen deprivation therapy, postmenopausal hormone therapy, testosterone depletion, human chorionic gonadotropin, prenatal sex hormone exposure, and the deficiency of leptin. This class of pharmaceuticals

(especially the corticosteroids) is used for a wide spectrum of medical conditions, and the broad scope of potential impacts is concerning. While some of the drugs in the larger Iatrogenic category have rather narrow applications, the long-term effects on neurodegenerative diseases of widely used drugs such as anesthetics and steroids should be cause for serious concern.

II-A9. Antihypertensive Agents

These agents include ACE inhibitors, ICI 118,551/Selective beta2AR antagonists, telmisartan/olmesartan, and Mecamylamine. Some of the anti-hypertensive agents listed are widely used because of the prevalence of hypertension, and their long-term effects need to be examined more closely. The main impacts listed are those on the surrogate endpoints, although the ACE inhibitors are linked to AD. The referenced papers don't report impacts at the cellular level, although, again, that does not imply the absence of such impacts.

II-A10. Gastrointestinal Agents

These agents include thiorphan/phosphoramidon, and the large class of proton pump inhibitors (omeprazole, pantoprazole, lansoprazole, esomeprazole, and rabeprazole). Again, this is disturbing for the long-term, because of the almost common-place used of this family of drugs for digestive problems.

II-B. Radiotherapy

Radiotherapy that involves the head region impacts cognition and AD.

II-C. Surgery/Invasive Treatments

The following categorization is not unique. Some procedures could be assigned to multiple categories. Surgeries/invasive procedures that contribute to AD tend to involve vessel occlusion, cerebral ischemia, broader cardiac surgery, estrogen depletion, and myriad forms of dialysis.

One interesting observation is that the surgery impacts are all on AD surrogate endpoints, not on AD directly, for the references selected. This may be due to personal choice of the authors. Some authors identified a number of surrogate endpoints that were impacted, and referred to the aggregate as Alzheimer's-like. Other authors would refer to the aggregate as Alzheimer's Disease. Since inhalation anesthesia seems to be a strong contributing factor, almost any major surgery employing this type of anesthesia would have to involve some potential risk for AD, either through the surrogate endpoints, or directly.

III. Biotoxic Agents

Biotoxic Agents reflect mainly the biological substances to which we are exposed naturally, but sometimes accidentally, and sometimes by design. This category is divided into five sub-categories: Mycotoxins; Exotoxins; Bacteria/Fungi/ Parasites; Viruses; Other. Biotoxins contributing to AD include some mycotoxins, but mainly exotoxins, bacteria, and viruses.

III-A. Mycotoxins

Only a few mycotoxins were identified, including ochratoxin A, fumonisin B1, and macrocyclic trichothecenes. Their impacts cover all four levels.

III-B. Exotoxins

Many exotoxins were identified, including excitotoxins (kainic acid/kainate, quisqualic acid, ibotenic acid, domoic acid, quinolinic acid/quinolinate), phosphatase inhibitors (okadaic acid), excitatory amino acids, malonate, annonaceous acetogenins, cyanobacteria (beta-N-methylamino-L-alanine/BMAA, saxitoxin, anatoxin-a, blue-green algae, microcystin), diphtheria toxin, pseudomonas aeruginosa exotoxin Y, saporins (192 IgG-saporin, p75-saporin), cycad plant (cycasin/methylazoxymethanol), glutamate/glutamine synthetase, mitochondrial inhibitors (rotenone, 3-NPA, antimycin, KCN, oligomycin). Some substances in the Other category could have been assigned to the Exotoxin category. The impacts were heavily weighted toward the cellular and biomarker levels, less so toward the performance level, and even less toward the disease level.

III-C. Bacteria/Fungi/Parasites

Myriad bacteria, fungi, and parasites (shown in [Table 8-3](#)) are dominant in sub-category III-C. The bacteria/bacterial infections include bacterial endotoxins, bacterial lipopolysaccharide, gram-negative bacterium, spirochetes, Chlamydomypha pneumoniae, Helicobacter pylori, Escherichia coli, Treponema pallidum, Tannerella forsythia, Treponema denticola, T. socranskii, T. pectinovorum, T. medium, T. amylovorum, T. maltophilum, Fusobacterium nucleatum, Prevotella intermedia, Chlamydia pneumoniae, Porphyromonas gingivalis, propionibacterium acnes, Treponemas, T. lecithinolyticum, and Borrelia burgdorferi. Bacteria are somewhat ubiquitous, so the flexibility of cause removal for items in this sub-category is much less than for items in the Lifestyle and Iatrogenic categories.

The fungi/fungal infections include Cryptococcus, Coccidioides, Aspergillus, Histoplasma, Blastomyces, C. famata, C. parapsilosis, C. glabrata, C. krusei, Candida albicans, Candida ortholopsis, Candida tropicalis, Cladosporium, Malassezia globosa, Malassezia restricta, Neosartorya hiratsukae, Phoma, Saccharomyces cerevisiae, and Sclerotinia borealis.

The parasites include Trypanosoma brucei rhodesiense, Trypanosoma brucei gambiense, Acanthamoeba, Balamuthia mandrillaris, Toxoplasma gondii, Taenia solium, Toxocara canis, T. cati, Toxocara ova, and Leishmania amazonensis.

III-D. Viruses

Myriad viruses (shown in [Table 2-7C](#)) are dominant in sub-category III-D. These viruses include Bornaviridae (Mammalian 1 bornavirus), Bunyaviridae (Hantavirus, La Crosse encephalitis virus), Coronaviridae (Human coronavirus

OC43, Murine hepatitis virus), Flaviviridae (Hepatitis C virus, Japanese encephalitis virus, Murray Valley encephalitis virus, St. Louis encephalitis virus, West Nile virus), Hepadnaviridae (Hepatitis B virus), Herpesviridae (Cytomegalovirus, Epstein-Barr virus, Herpes simplex virus 1, Human herpesvirus 6), Orthomyxoviridae (Influenza A virus (H1N1), Influenza A virus (H3N2), Influenza A virus (H5N1)), Paramyxoviridae (Hendra virus, Measles virus), Picornaviridae (Enterovirus 71, Theiler's murine encephalomyelitis virus), Polyomaviridae (Simian 40 virus large T antigen), Retroviridae (Human immunodeficiency virus 1, Human T-cell leukemia virus, Moloney murine leukemia virus), Rhabdoviridae (Chandipura virus), Togaviridae (Chikungunya virus, Eastern equine encephalitis virus, Venezuelan equine encephalitis virus).

Based on the volume of records examined in the bacteria/fungi/viruses categories, linkages to tau and Abeta pathologies were mentioned often, as were direct linkages to AD. Neuroinflammation induced by bacterial and viral infections appeared to be responsible for some of the tau pathology.

III-E. Other

The category named Other contains myriad substances, which are listed in [Table 2-7C](#). It includes some plant-based contributing factors (e.g., 12-myristate 13-acetate, Forskolin, arecoline hydrobromide, quisqualate, etc), and a very substantial number of endogenous substances that were administered exogenously (e.g., 27-hydroxycholesterol, acetylcholinesterase, Bradykinin, CD40, etc).

Ordinarily, endogenous substances are not foundational causes, but intermediate causes, since their harmful effects typically are driven by other foundational causes. However, for consistency, if an endogenous substance was administered exogenously for purposes of experimentation or trial, it was considered as an exotoxin or other foundational cause for the purposes of this monograph. Thus, amyloid beta, an endogenous substance, could be viewed as an endotoxin when internal processes are being discussed, but also as an exotoxin when administered in laboratory experiments.

Because of the heterogeneity of the myriad substances in this class, specific impact statements need to be tailored to the specific members of this class. However, from an overall perspective, the majority of impacts are at the cellular and biomarker levels, much fewer impacts at the performance level, and very few impacts at the disease level. It should be cautioned again that the absence of impacts reported should not be interpreted as their non-existence. They may not exist, they may exist and were not an objective of the research, or they may exist and were not reported.

IV. Occupational/Environmental Exposures

IV-A. Chemicals/Materials

IV-A1. Industrial and Household Chemicals/Materials

This sub-category is very broad. There is overlap among the next level taxonomy elements; for example, some of the solvents are hydrocarbons and some of the chemical compounds are hydrocarbons.

This sub-category includes hydrocarbons, solvents, chemical compounds, and Other.

The hydrocarbons sub-category includes, e.g., methylcholanthrene, polycyclic aromatic hydrocarbons, diesel fuel, kerosene, etc.

The solvents sub-category includes, e.g., petroleum-based solvents (mineral turpentine, diesel fuel, fuel oil, kerosene, etc), chlorinated solvents (trichloroethylene, perchlorethylene, trichloroethane, dichloromethane, benzene), organic solvents (benzene, toluene, phenols, alcohols, ketones, methylmethacrylate), dimethyl sulfoxide/ DMSO, etc. The impacts from the members of this sub-category, as reported in the references selected, tended to focus on performance and disease. This was due to a number of epidemiology studies of occupational impacts, which tend to focus on higher level impacts.

The chemical compounds/Other sub-categories include a full spectrum of chemical compounds, especially chlorine, bromine, nitrogen, sodium, sulfur, and carbon compounds. Members of these sub-categories include, e.g., Neurotoxins (6-hydroxydopamine/6-OHDA, 5,6-dihydroxytryptamine/ 5,6-DHT, -5,7-dihydroxytryptamine/5,7-DHT, Type-2 Alkenes/Reactive aldehydes (Acrolein, 4-Hydroxynonenal/HNE, Acrylamide, Methyl glyoxal), Nitrosamine/ N-nitrosodiethylamine, Adenosine, 3', 5'-cyclic monophosphate/cAMP, Carbon tetrachloride, Chemical warfare agents/ nerve agents (organophosphates, soman, sarin, ethyl S-2-di-isopropylaminoethyl-phosphonothiolate, VX, tabun), Cyanide (Potassium cyanide, Sodium cyanide), Formaldehyde, Hydrogen Peroxide/H₂O₂, Lipophilic chemicals (persistent organic pollutants, bisphenol A, phthalates, low molecular weight hydrocarbons, polynuclear aromatic hydrocarbons, endocrine disruptors), Sulfur dioxide/SO₂, Phthalates (Di-(2-ethylhexyl)-phthalate/DEHP, mono-2-ethylhexyl phthalate/MEHP, DEHP metabolites), Brominated flame retardants (hexabromocyclo-dodecane/HBCD, tetrabromobisphenol-AI/TBBPA, decabromodiphenyl ether/DBDE, polybrominated diphenyl ethers/PBDEs), Ammonia, Hypochlorous acid/HOCl, Methanol, Peroxynitrite, Sodium azide, Acetaldehyde, 3-Bromopyruvate, Vehicular emission oxides (nitrogen dioxide/NO₂, carbon monoxide/CO), Sodium fluoride, Membrane-mimicking detergents (sodium dodecyl sulfate, lithium dodecyl sulfate), Nitric oxide donors (sodium nitroprusside, DETA NONOate), Amorphous aluminosilicates, Sodium nitrite, Tert-butyl hydroperoxide/t-BHP, Alloxan, Ammonium chloride, Anionic dyes (Congo Red, Thiazine Red, Thioflavin S), Aroclor 1254, Cobalt chloride, Magnesium chloride, 2,2'-azobis(2-methylpropionamidine)

dihydrochloride/AAPH, Methylglyoxal/ Glyoxal, Disuccinimidyl suberate, Naphthazarin/5,8-dihydroxy-1,4-naphthoquinone/ 5,8-dihydroxy-1,4-naphthalenedione, Pyrithiamine, Pyrogallol, Glyceraldehyde-3-phosphate/GAPDH, Ethylcholine mustard aziridinium ion/AF64A, 1-methyl-4-phenylpyridinium ion, 2,2'-dithiodipyridine, Aftin-4, Kaolin, Ozone, 2;3;7;8-tetrachlorodibenzo-p-dioxin.

The largest sub-category, by far, is the chemical compounds. This sub-category is associated with roughly even impacts at the cellular, biomarker, and performance levels. There is much less reported direct association at the disease level, for the selected references.

IV-A2. Agricultural Chemicals

This sub-category emphasizes pesticides, herbicides, insecticides, and fungicides, and includes, e.g., Organochlorine pesticides, Organophosphate pesticides, 2,4,5-trichlorophenoxyacetic acid, 2,4-dichlorophenoxyacetic acid, Agent Orange, Aldrin, Alkylphenolpolyethoxylates, APEOs, Arsenic, Beta-hexachlorocyclohexane/beta-HCH, Bipyridyles, Carbamates, Carbofuran, Chlorfenvinphos, Chlorpyrifos/ CPF, Cycloheximide, Cypermethrin, Deltamethrin, Dichlorodiphenyldichloroethylene/DDE, Dichlorodiphenyltrichloroethane/DDT, Dichlorodiphenyldichloroethane/DDD, Dieldrin, Dimethyl parathion, Endosulfan, Famoxadone, Fenamidone, Glyphosate, Hexachlorobenzene, Hexachlorocyclohexane/HCH, Imidacloprid, Lindane, Maneb, Methamidophos, Methyl parathion, Neonicotinoids, Nonylphenol, Octylphenol, Paraquat, Parathion, Pyraclostrobin, Pyrethroids, Trans-nonachlor, Trichlorfon/TCF, Trifloxystrobin, etc.

Adverse impacts span the cellular, biomarker, performance, and disease levels. These chemicals impact the larger population through the food supply, and have devastating effects on the agricultural workforce. Given the ubiquitous nature of agricultural chemicals and industrial/household chemicals in daily life, eliminating them will be challenging.

IV-A3. Materials

The materials/particulates that constitute this category are broadly-based, and in many cases have become part of the average lifestyle. Some examples include:

- heavy metals (e.g., aluminum, arsenic, cadmium, calcium/Ca²⁺/CaCl₂, calcium ionophore/A-23187/calcimycin, cobalt, copper, iron, lead, manganese, mercury, methylmercury, selenium, tin, zinc, etc)
- particulates (e.g., air pollution, surgical smoke, dust, etc)
- nanoparticles (e.g., iron nanoparticles, titanium dioxide nanoparticles, CdSe quantum dots, diesel exhaust nanoparticles, alumina nanoparticles, manganese oxide nanoparticles, copper nanoparticles, silicon dioxide nanoparticles, zinc oxide nanoparticles, silver nanoparticles, nickel nanoparticles, etc)

Impacts of these materials through diverse ingestion pathways cover the full spectrum of levels. Both metals and small sized particles have adverse effects. When the two are combined, the synergy becomes problematical. Metallic particles within the nanoparticle range (<100 nm) are able to cross many internal protective barriers, including the blood-brain-barrier (BBB), and cause myriad problems. While penetration of the BBB by nanoparticles is sometimes used for drug delivery, unwanted penetration (as reflected in the present study's references) can be quite harmful.

IV-B. Physical/Mechanical

This sub-category includes ionizing radiation, non-ionizing non-visible radiation, non-ionizing visible radiation, sound radiation, temperature fields, and force fields.

The ionizing radiation component includes, e.g., gamma radiation (dental X-rays, gamma rays, etc), particle radiation (56Fe-particle radiation, cosmic radiation, HZE particle radiation), radionuclide pollutants (uranium, cesium, cobalt, radon). The main impacts focus on the biomarker and performance levels, with some at the cellular levels and much less at the disease level.

The non-ionizing non-visible radiation component includes, e.g., electromagnetic fields at myriad frequencies, such as extremely low frequency/ELF-EMF, 900 MHz radiofrequency (RF), electromagnetic pulse/EMP, electroconvulsive shock/ECS, UV irradiation, etc. The references selected emphasize biomarker level impact, then performance level impacts, and some links to AD.

The non-ionizing visible radiation component includes e.g., UV irradiation, photolysis of 1-(2-nitrophenyl)ethyl sulfate, with impacts emphasizing Abeta production.

The sound radiation component includes, e.g., short-lasting impulse noise, chronic noise exposure, night-time aircraft noise, ultrasound sonication, etc. While impacts are identified at the cellular, biomarker, and disease levels, Abeta generation and exacerbation are emphasized.

The thermal component includes, e.g., cold water hypothermia, cold water stress, heat shock, heat stress, heating, hyperthermia, etc, and impacts the cellular, biomarker, and performance levels.

The physical force component includes, e.g., blasts, blast traumatic brain injury, hippocampal injury, accumulated mechanical stress, spinal cord injury, frequent strong Valsalva maneuvers, long hours of repetitive heavy lifting, sequences of blows during the playing of a wind instrument, forceful and repetitive cough, bearing-down efforts during parturition, history of head trauma, etc. The impacts cover all four levels, with perhaps added emphasis on AD.

The main components of this sub-category, the different types of physical fields with which we interact (electromagnetic, sound, temperature, pressure, force) are ubiquitous. Avoiding exposure to these emissions/interactions would require a major change in lifestyle (and probably location) for most people. The 'Other' category is small, and contains adverse effects from over- and under-exposure to oxygen.

V. Psychosocial/Socioeconomic

Psychosocial/Socioeconomic are those foundational causes that reflect personal problems, social interactions, larger societal interactions, and economic relationships. Psychological and sociological stress were major causative factors; economic types of stress seemed to play less of a direct role.

V-A. Psychological

This sub-category includes, e.g., chronic stress (repeated stress, chronic mild stress, chronic psychological stress, multiple chronic stresses, behavioral stress, childhood trauma, bereavement, chronic restraint stress, high job stress), low mental activity (low cognitively engaging activity, low purposeful activities, low leisure activities/low hobbies, low music/drawing/meditation/reading/arts/crafts), etc. Impacts seemed to spread out over all four levels.

V-B. Sociological

This sub-category includes, e.g., social isolation (isolation, loneliness, living alone, unmarried, maternal separation, low social activity index, low social support at work, constricted life space), low education (illiteracy), etc. Impacts cover all four levels, with emphasis on the biomarker, performance, and disease levels.

V-C. Economic

This sub-category includes, e.g., economic stress (childhood socioeconomic circumstance), etc. In this small sub-category, impact focused on cognitive deficits.

Chapter 6. Bibliography

A. Cumulative Risk Assessment

EFSA Colloquium 7 - Cumulative risk assessment of pesticides to human health: The way forward 28-29 November 2006, Parma, Italy. Agro Food Industry Hi-Tech. 2006;17(5):34-.

Aagaard A, Brock T, Capri E, Duquesne S, Filipic M, Hernandez-Jerez AF, et al. Scientific Opinion on the relevance of dissimilar mode of action and its appropriate application for cumulative risk assessment of pesticides residues in food. Efsa Journal. 2013;11(12).

Aagaard A, Brock T, Capri E, Duquesne S, Filipic M, Hernandez-Jerez A, et al. Scientific Opinion on the identification of pesticides to be included in cumulative assessment groups on the basis of their toxicological profile. Efsa Journal. 2013;11(7).

Abt E, Rodricks JV, Levy JJ, Zeise L, Burke TA. Science and Decisions: Advancing Risk Assessment. Risk Analysis. 2010;30(7):1028-36.

Adeshina E, Mast T, Moore N, Mahfouz A, Protzel A, Choudhury H. Identifying triazine herbicides on EPA drinking water contaminant candidate list (CCL) for common mechanism of toxicity and cumulative risk assessment. Toxicological Sciences. 2003;72:90-.

Afroze S, Allan A, Somenahalli S. Analysis of stressors' interconnectedness: a pathway for cumulative effects assessment of an urban road transport system in Dhaka. In: Ulengin F, Li K, Boltze M, editors. World Conference on Transport Research - Wctr 2016. Transportation Research Procedia. 252017.

Agarwal G, Singhal P, LaiMittal M, Ieee. Risks Assessment of Lower Tier Suppliers Using Operational Reliabilities and Product Availabilities. 2011 Ieee International Conference on Industrial Engineering and Engineering Management. International Conference on Industrial Engineering and Engineering Management IEEM2011. p. 226-30.

Al Naggar Y, Codling G, Giesy JP. Human dietary intake and hazard characterization for residues of neonicotinoides and organophosphorus pesticides in Egyptian honey. Toxicological and Environmental Chemistry. 2017;99(9-10):1397-408.

Al Zabadi H, Ferrari L, Sari-Minodier I, Kerautret MA, Tiberghien A, Paris C, et al. Integrated exposure assessment of sewage workers to genotoxins: a urinary biomarker approach and oxidative stress evaluation. *Environmental Health*. 2011;10.

Al-Malahmeh AJ, Al-ajlouni AM, Wesseling S, Vervoort J, Rietjens I. Determination and risk assessment of naturally occurring genotoxic and carcinogenic alkenylbenzenes in basil-containing sauce of pesto. *Toxicology Reports*. 2017;4:1-8.

Alajlouni AM, Al-Malahmeh AJ, Isnaeni FN, Wesseling S, Vervoort J, Rietjens I. Level of Alkenylbenzenes in Parsley and Dill Based Teas and Associated Risk Assessment Using the Margin of Exposure Approach. *Journal of Agricultural and Food Chemistry*. 2016;64(45):8640-6.

Alajlouni AM, Al-Malahmeh AJ, Wesseling S, Kalli M, Vervoort J, Rietjens I. Risk assessment of combined exposure to alkenylbenzenes through consumption of plant food supplements containing parsley and dill. *Food Additives and Contaminants Part a-Chemistry Analysis Control Exposure & Risk Assessment*. 2017;34(12):2201-11.

Alexeeff GV, Faust JB, August LM, Milanes C, Randles K, Zeise L, et al. A Screening Method for Assessing Cumulative Impacts. *International Journal of Environmental Research and Public Health*. 2012;9(2):648-59.

Alfredo KA, Seidel C, Ghosh A, Roberson JA. Using a relative health indicator (RHI) metric to estimate health risk reductions in drinking water. *Environmental Monitoring and Assessment*. 2017;189(3).

Alves S, Tilghman J, Rosenbaum A, Payne-Sturges DC. U.S. EPA Authority to Use Cumulative Risk Assessments in Environmental Decision-Making. *International Journal of Environmental Research and Public Health*. 2012;9(6):1997-2019.

Anand SS, Mehendale HM. Liver regeneration: a critical toxicodynamic response in predictive toxicology. *Environmental Toxicology and Pharmacology*. 2004;18(2):149-60.

Andersen ME, Dennison JE. Mechanistic approaches for mixture risk assessments - Present capabilities with simple mixtures and future directions. *Environmental Toxicology and Pharmacology*. 2004;16(1-2):1-11.

Antoniuk T. Cumulative effects assessment and linear corridors: The representative areas approach. GoodrichMahoney JW, Mutrie DF, Guild CA, editors 2002. 209-18 p.

Arciszewski TJ, Munkittrick KR, Scrimgeour GJ, Dube MG, Wrona FJ, Hazewinkel RR. Using Adaptive Processes and Adverse Outcome Pathways to Develop Meaningful, Robust, and Actionable Environmental Monitoring Programs. *Integrated Environmental Assessment and Management*. 2017;13(5):877-91.

Arnold LM, Hanna K, Noble B. Freshwater cumulative effects and environmental assessment in the Mackenzie Valley, Northwest Territories: challenges and decision-maker needs. *Impact Assessment and Project Appraisal*.

Arzhenovskiy SV, Bahteev AV. THE METHODOLOGICAL APPROACH TO THE COMBINED ESTIMATION OF FALSIFICATION RISK DUE TO FRAUD IN AN AUDIT OF FINANCIAL STATEMENTS. *Terra Economicus*. 2013;11(2):57-62.

Ashworth MJ, Chappell A, Ashmore E, Fowles J. Analysis and Assessment of Exposure to Selected Phthalates Found in Children's Toys in Christchurch, New Zealand. *International Journal of Environmental Research and Public Health*. 2018;15(2).

Assuncao R, Martins C, Vasco E, Jager A, Oliveira C, Cunha SC, et al. Portuguese children dietary exposure to multiple mycotoxins - An overview of risk assessment under MYCOMIX project. *Food and Chemical Toxicology*. 2018;118:399-408.

Assuncao R, Vasco E, Nunes B, Loureiro S, Martins C, Alvito P. Single-compound and cumulative risk assessment of mycotoxins present in breakfast cereals consumed by children from Lisbon region, Portugal. *Food and Chemical Toxicology*. 2015;86:274-81.

Atlin C, Gibson R. Lasting regional gains from non-renewable resource extraction: The role of sustainability-based cumulative effects assessment and regional planning for mining development in Canada. *Extractive Industries and Society-an International Journal*. 2017;4(1):36-52.

August LM, Faust JB, Cushing L, Zeise L, Alexeeff GV. Methodological Considerations in Screening for Cumulative Environmental Health Impacts: Lessons Learned from a Pilot Study in California. *International Journal of Environmental Research and Public Health*. 2012;9(9):3069-84.

Backhaus T. Environmental Risk Assessment of Pharmaceutical Mixtures: Demands, Gaps, and Possible Bridges. *Aaps Journal*. 2016;18(4):804-13.

Backhaus T, Faust M, Kortenkamp A. Cumulative Risk Assessment: A European Perspective on the State of the Art and the Necessary Next Steps Forward. *Integrated Environmental Assessment and Management*. 2013;9(4):547-8.

Backhaus T, Karlsson M. Screening level mixture risk assessment of pharmaceuticals in STP effluents. *Water Research*. 2014;49:157-65.

Bacon CM, Getz C, Kraus S, Montenegro M, Holland K. The Social Dimensions of Sustainability and Change in Diversified Farming Systems. *Ecology and Society*. 2012;17(4).

Bal-Price A, Pistollato F, Sachana M, Bopp SK, Munn S, Worth A. Strategies to improve the regulatory assessment of developmental neurotoxicity (DNT) using in vitro methods. *Toxicology and Applied Pharmacology*. 2018;354:7-18.

Ball MA, Noble BF, Dube MG. Valued ecosystem components for watershed cumulative effects: An analysis of environmental impact assessments in the South Saskatchewan River watershed, Canada. *Integrated Environmental Assessment and Management*. 2013;9(3):469-79.

Ball M, Somers G, Wilson JE, Tanna R, Chung C, Duro DC, et al. Scale, assessment components, and reference conditions: Issues for cumulative effects assessment in Canadian watersheds. *Integrated Environmental Assessment and Management*. 2013;9(3):370-9.

Barton HA, Pope CN. Cumulative risk assessment getting from toxicology to quantitative analysis. *Toxicological Sciences*. 2003;72:6-.

Barzyk TM, Huang HT, Williams R, Kaufman A, Essoka J. Advice and Frequently Asked Questions (FAQs) for Citizen-Science Environmental Health Assessments. *International Journal of Environmental Research and Public Health*. 2018;15(5).

Barzyk TM, Wilson S, Wilson A. Community, State, and Federal Approaches to Cumulative Risk Assessment: Challenges and Opportunities for Integration. *International Journal of Environmental Research and Public Health*. 2015;12(5):4546-71.

Bechaux C, Zeilmaker M, Merlo M, Bokkers B, Crepet A. An integrative risk assessment approach for persistent chemicals: A case study on dioxins, furans

and dioxin-like PCBs in France. *Regulatory Toxicology and Pharmacology*. 2014;70(1):261-9.

Bechaux C, Zetlaoui M, Tressou J, Leblanc JC, Heraud F, Crepet A. Identification of pesticide mixtures and connection between combined exposure and diet. *Food and Chemical Toxicology*. 2013;59:191-8.

Belarde TA, Railsback SF. New predictions from old theory: Emergent effects of multiple stressors in a model of piscivorous fish. *Ecological Modelling*. 2016;326:54-62.

Bennekou SH, Mohimont L, Steinkellner H, Terron A, Bergkvist C, Crivellente F, et al. EFSA approach to cumulative risk assessment of pesticides. *Toxicology Letters*. 2014;229:S32-S.

Benson R. Hazard to the developing male reproductive system from cumulative exposure to phthalate esters-dibutyl phthalate, diisobutyl phthalate, butylbenzyl phthalate, diethylhexyl phthalate, dipentyl phthalate, and diisononyl phthalate. *Regulatory Toxicology and Pharmacology*. 2009;53(2):90-101.

Bernard BK, Gordon EB. An evaluation of the common mechanism approach to the Food Quality Protection Act: Captan and four related fungicides, a practical example. *International Journal of Toxicology*. 2000;19(1):43-61.

Boobis AR, Ossendorp BC, Banasiak U, Hamey PY, Sebestyen I, Moretto A. Cumulative risk assessment of pesticide residues in food. *Toxicology Letters*. 2008;180(2):137-50.

Boon PE, Van der Voet H, Van Raaij MTM, Van Klaveren JD. Cumulative risk assessment of the exposure to organophosphorus and carbamate insecticides in the Dutch diet. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2008;46(9):3090-8.

Bopp SK, Barouki R, Brack W, Dalla Costa S, Dorne J, Drakvik PE, et al. Current EU research activities on combined exposure to multiple chemicals. *Environment International*. 2018;120:544-62.

Bopp SK, Kienzler A, Richarz AN, van der Linden SC, Paini A, Parissis N, et al. Regulatory assessment and risk management of chemical mixtures: challenges and ways forward. *Critical Reviews in Toxicology*. 1-16.

Borchers A, Teuber SS, Keen CL, Gershwin ME. Food Safety. *Clinical Reviews in Allergy & Immunology*. 2010;39(2):95-141.

Borg D, Lund BO, Lindquist NG, Hakansson H. Cumulative health risk assessment of 17 perfluoroalkylated and polyfluoroalkylated substances (PFASs) in the Swedish population. *Environment International*. 2013;59:112-23.

Borgert CJ. Predicting interactions from mechanistic information: Can omic data validate theories? *Toxicology and Applied Pharmacology*. 2007;223(2):114-20.

Borgert CJ, Price B, Wells CS, Simon GS. Evaluating chemical interaction studies for mixture risk assessment. *Human and Ecological Risk Assessment*. 2001;7(2):259-305.

Borgert CJ, Sargent EV, Casella G, Dietrich DR, McCarty LS, Golden RJ. The human relevant potency threshold: reducing uncertainty by human calibration of cumulative risk assessments. *Regulatory toxicology and pharmacology : RTP*. 2012;62(2):313-28.

Bornehag CG, Gennings C. A novel approach to chemical mixture risk assessment - Linking data from population based epidemiology and experimental animal tests. *Toxicology Letters*. 2018;295:S52-S.

Bosgra S, van der Voet H, Boon PE, Slob W. An integrated probabilistic framework for cumulative risk assessment of common mechanism chemicals in food: An example with organophosphorus pesticides. *Regulatory Toxicology and Pharmacology*. 2009;54(2):124-33.

Bosgra S, van der Voet H, Boon P, Muller AK, Bos P, Slob W. An integrated framework for probabilistic cumulative risk assessment of chemicals in food. *Toxicology Letters*. 2007;172:S100-S1.

Bosgra S, van Eijkeren JCH, van der Schans MJ, Langenberg JP, Slob W. Toxicodynamic analysis of the inhibition of isolated human acetylcholinesterase by combinations of methamidophos and methomyl in vitro. *Toxicology and Applied Pharmacology*. 2009;236(1):1-8.

Boutilier RG, Black L. Legitimizing industry and multi-sectoral regulation of cumulative impacts: A comparison of mining and energy development in Athabasca, Canada and the Hunter Valley, Australia. *Resources Policy*. 2013;38(4):696-703.

Brack W, Escher BI, Muller E, Schmitt-Jansen M, Schulze T, Slobodnik J, et al. Towards a holistic and solution-oriented monitoring of chemical status of European water bodies: how to support the EU strategy for a non-toxic environment? *Environmental Sciences Europe*. 2018;30.

Breckenridge CB, Sielken RL. Aggregate and cumulative risk assessment. *Abstracts of Papers of the American Chemical Society*. 1998;215:U32-U.

Brewer LE, Wright JM, Rice G, Neas L, Teuschler L. Causal inference in cumulative risk assessment: The roles of directed acyclic graphs. *Environment International*. 2017;102:30-41.

Brocca D, Medina-Pastor P, Miron I, Reich H, Triacchini G, Muller E, et al. The 2010 European Union Report on Pesticide Residues in Food. *Efsa Journal*. 2013;11(3).

Brock WJ, Rodricks JV, Rulis A, Dellarco VL, Gray GM, Lane RW. Food safety: Risk assessment methodology and decision-making criteria. *International Journal of Toxicology*. 2003;22(6):435-51.

Bross M. The experience in performing cumulative risk assessment for pesticides - An industry perspective. *Toxicology Letters*. 2014;229:S33-S.

Burgos S, Madrid MA, Maldonado A, Medina F, Iglesias V. Integrating multivariate and geostatistical analyses for assessing the socio-environmental vulnerability of children in the vicinity of a contaminated site. *International Journal of Environmental Health Research*. 2018;28(6):642-52.

Burke T, Natl Res C. Implementing Cumulative Risk Assessment 2009. 213-39 p.

Burwell-Naney K, Wilson SM, Whitlock ST, Puett R. Hybrid Resiliency-Stressor Conceptual Framework for Informing Decision Support Tools and Addressing Environmental Injustice and Health Inequities. *International Journal of Environmental Research and Public Health*. 2019;16(8).

Buschke FT, Vanschoenwinkel B. Mechanisms for the inclusion of cumulative impacts in conservation decision-making are sensitive to vulnerability and irreplaceability in a stochastically simulated landscape. *Journal for Nature Conservation*. 2014;22(3):265-71.

Buse CG, Lai V, Cornish K, Parkes MW. Towards environmental health equity in health impact assessment: innovations and opportunities. *International Journal of Public Health*. 2019;64(1):15-26.

Buysschaert ID, Grulois V, Eloy P, Jorissen M, Rombaux P, Bertrand B, et al. Genetic evidence for a role of IL33 in nasal polyposis. *Allergy*. 2010;65(5):616-22.

Cabrera Paez Y, Aguilar Betancourt C, Gonzalez-Sanson G. Reproductive and morphological indicators of the fish *Gambusia puncticulata* (Poeciliidae) in

very polluted sections of Almendares River, Cuba. *Revista de biologia tropical*. 2008;56(4):1991-2004.

Caldas ED, Tressou J, Boon PE. Dietary exposure of Brazilian consumers to dithiocarbamate pesticides - A probabilistic approach. *Food and Chemical Toxicology*. 2006;44(9):1562-71.

Callahan MA, Sexton K. If cumulative risk assessment is the answer, what is the question? *Environmental Health Perspectives*. 2007;115(5):799-806.

Canter LW, Atkinson SF. Multiple uses of indicators and indices in cumulative effects assessment and management. *Environmental Impact Assessment Review*. 2011;31(5):491-501.

Canter L, Atkinson S, Sadler B. Special Issue on cumulative effects assessment and management Preface. *Environmental Impact Assessment Review*. 2011;31(5):451-2.

Carter AV, Fraser GS, Zalik A. Environmental Policy Convergence in Canada's Fossil Fuel Provinces? Regulatory Streamlining, Impediments, and Drift. *Canadian Public Policy-Analyse De Politiques*. 2017;43(1):61-76.

Castorina R, Bradman A, McKone TE, Barr DB, Harnly ME, Eskenazi B. Cumulative organophosphate pesticide exposure and risk assessment among pregnant women living in an agricultural community: A case study from the CHAMACOS cohort. *Environmental Health Perspectives*. 2003;111(13):1640-8.

Caudeville J, Ioannidou D, Boulvert E, Bonnard R. Cumulative Risk Assessment in the Lorraine Region: A Framework to Characterize Environmental Health Inequalities. *International Journal of Environmental Research and Public Health*. 2017;14(3).

Chahine T, Schultz BD, Zartarian VG, Xue JP, Subramanian SV, Levy JI. Modeling Joint Exposures and Health Outcomes for Cumulative Risk Assessment: The Case of Radon and Smoking. *International Journal of Environmental Research and Public Health*. 2011;8(9):3688-711.

Chaisson CF, Price PS. Organophosphorous cumulative risk assessment: Determination of risk drivers and other key factors. *Epidemiology*. 2002;13(4):S216-S.

Chang JW, Chen CY, Yan BR, Chang MH, Tseng SH, Kao YM, et al. Cumulative risk assessment for plasticizer-contaminated food using the hazard index approach. *Environmental pollution (Barking, Essex : 1987)*. 2014;189:77-84.

Chang JW, Lee CC, Pan WH, Chou WC, Huang HB, Chiang HC, et al. Estimated Daily Intake and Cumulative Risk Assessment of Phthalates in the General Taiwanese after the 2011 DEHP Food Scandal. *Scientific Reports*. 2017;7.

Chang JW, Yan BR, Chang MH, Tseng SH, Kao YM, Chen JC, et al. Cumulative risk assessment for plasticizer-contaminated food using the hazard index approach. *Environmental Pollution*. 2014;189:77-84.

Chang J-W, Lee C-C, Pan W-H, Chou W-C, Huang H-B, Chiang H-C, et al. Estimated Daily Intake and Cumulative Risk Assessment of Phthalates in the General Taiwanese after the 2011 DEHP Food Scandal. *Scientific reports*. 2017;7:45009.

Chari R, Burke TA, White RH, Fox MA. Integrating Susceptibility into Environmental Policy: An Analysis of the National Ambient Air Quality Standard for Lead. *International Journal of Environmental Research and Public Health*. 2012;9(4):1077-96.

Chasen ST, Perni SC, Kalish RB, Chervenak FA. First-trimester risk assessment for Trisomies 21 and 18 in twin pregnancy. *American Journal of Obstetrics and Gynecology*. 2007;197(4).

Chen JJ, Chen YJ, Rice G, Teuschler LK, Hamernik K, Protzel A, et al. Using dose addition to estimate cumulative risks from exposures to multiple chemicals. *Regulatory toxicology and pharmacology : RTP*. 2001;34(1):35-41.

Chen JJ, Chen YJ, Teuschler LK, Rice G, Hamernik K, Protzel A, et al. Cumulative risk assessment for quantitative response data. *Environmetrics*. 2003;14(4):339-53.

Chen N, Shuai WJ, Hao XM, Zhang HC, Zhou DM, Gao JA. Contamination of Phthalate Esters in Vegetable Agriculture and Human Cumulative Risk Assessment. *Pedosphere*. 2017;27(3):439-51.

Chen Y, Li L-N, Yang C-Q, Hao Z-P, Sun H-K, Li Y. Countermeasures for priority control of toxic VOC pollution. *Huan jing ke xue= Huanjing kexue*. 2011;32(12):3469-75.

Chilima JS, Blakely JAE, Noble BF, Patrick RJ. Institutional arrangements for assessing and managing cumulative effects on watersheds: Lessons from the Grand River watershed, Ontario, Canada. *Canadian Water Resources Journal*. 2017;42(3):223-36.

Chilima JS, Gunn JAE, Noble BF, Patrick RJ. Institutional considerations in watershed cumulative effects assessment and management. *Impact Assessment and Project Appraisal*. 2013;31(1):74-84.

Christensen KLY, Makris SL, Lorber M. Generation of hazard indices for cumulative exposure to phthalates for use in cumulative risk assessment. *Regulatory Toxicology and Pharmacology*. 2014;69(3):380-9.

Christensen KLY, White P. A Methodological Approach to Assessing the Health Impact of Environmental Chemical Mixtures: PCBs and Hypertension in the National Health and Nutrition Examination Survey. *International Journal of Environmental Research and Public Health*. 2011;8(11):4220-37.

Christensen L, Krogman N, Parlee B. A culturally appropriate approach to civic engagement: Addressing forestry and cumulative social impacts in southwest Yukon. *Forestry Chronicle*. 2010;86(6):723-9.

Cocklin C, Parker S, Hay J. NOTES ON CUMULATIVE ENVIRONMENTAL-CHANGE .1. CONCEPTS AND ISSUES. *Journal of Environmental Management*. 1992;35(1):31-49.

Cocklin C, Parker S, Hay J. NOTES ON CUMULATIVE ENVIRONMENTAL-CHANGE .2. A CONTRIBUTION TO METHODOLOGY. *Journal of Environmental Management*. 1992;35(1):51-67.

Coecke S, Pelkonen O, Leite SB, Bernauer U, Bessems JGM, Bois FY, et al. Toxicokinetics as a key to the integrated toxicity risk assessment based primarily on non-animal approaches. *Toxicology in Vitro*. 2013;27(5):1570-7.

Collins BD, Pess GR. Critique of Washington's watershed analysis program. *Journal of the American Water Resources Association*. 1997;33(5):997-1010.

Colnot T, Dekant W. Approaches for grouping of pesticides into cumulative assessment groups for risk assessment of pesticide residues in food. *Regulatory Toxicology and Pharmacology*. 2017;83:89-99.

Connelly R. Canadian and international EIA frameworks as they apply to cumulative effects. *Environmental Impact Assessment Review*. 2011;31(5):453-6.

Conner P, Westgren M, Marsk A, Gustafsson S, Kublickas M. Combined ultrasound and biochemistry for risk evaluation in the first trimester. *Acta Obstetricia Et Gynecologica Scandinavica*. 2012;91(1):34-8.

Cooney CM. EPA charts new course in draft cumulative risk assessment for pesticides. *Environmental science & technology*. 1999;33(21):445A-6A.

Cooper LM. CEA in policies and plans: UK case studies. *Environmental Impact Assessment Review*. 2011;31(5):465-80.

Coors A, Vollmar P, Sacher F, Polleichtner C, Hassold E, Gildemeister D, et al. Prospective environmental risk assessment of mixtures in wastewater treatment plant effluents - Theoretical considerations and experimental verification. *Water Research*. 2018;140:56-66.

Coors A, Weisbrod B, Schoknecht U, Sacher F, Kehrer A. PREDICTING ACUTE AND CHRONIC EFFECTS OF WOOD PRESERVATIVE PRODUCTS IN DAPHNIA MAGNA AND PSEUDOKIRCHNERIELLA SUBCAPITATA BASED ON THE CONCEPT OF CONCENTRATION ADDITION. *Environmental Toxicology and Chemistry*. 2014;33(2):382-93.

Crepet A, Heraud F, Bechaux C, Gouze ME, Pierlot S, Fastier A, et al. The PERICLES research program: An integrated approach to characterize the combined effects of mixtures of pesticide residues to which the French population is exposed. *Toxicology*. 2013;313(2-3):83-93.

Crepet A, Tressou J, Graillot V, Bechaux C, Pierlot S, Heraud F, et al. Identification of the main pesticide residue mixtures to which the French population is exposed. *Environmental Research*. 2013;126:125-33.

Crepet A, Vanacker M, Sprong C, de Boer W, Blaznik U, Kennedy M, et al. Selecting mixtures on the basis of dietary exposure and hazard data: application to pesticide exposure in the European population in relation to steatosis. *International Journal of Hygiene and Environmental Health*. 2019;222(2):291-306.

Culleres DB, Boesten J, Bolognesi C, Boobis A, Buchert A, Capri E, et al. Opinion of the Scientific Panel on Plant Protection products and their Residues to evaluate the suitability of existing methodologies and, if appropriate, the identification of new approaches to assess cumulative and synergistic risks from pesticides to human health with a view to set MRLs for those pesticides in the frame of Regulation (EC) 396/2005. *Efsa Journal*. 2008;6(5).

Culleres DB, Boesten J, Bolognesi C, Boobis A, Buchert A, Capri E, et al. Scientific Opinion on Risk Assessment for a Selected Group of Pesticides from the Triazole Group to Test Possible Methodologies to Assess Cumulative Effects from Exposure through Food from these Pesticides on Human Health. *Efsa Journal*. 2009;7(9).

Dale VH, Biddinger GR, Newman MC, Oris JT, Suter GW, Thompson T, et al. Enhancing the ecological risk assessment process. *Integrated environmental assessment and management*. 2008;4(3):306-13.

Dalton G, Allan G, Beaumont N, Georgakaki A, Hacking N, Hooper T, et al. Economic and socio-economic assessment methods for ocean renewable energy: Public and private perspectives. *Renewable & Sustainable Energy Reviews*. 2015;45:850-78.

Daughton CG. Using biomarkers in sewage to monitor community-wide human health: Isoprostanes as conceptual prototype. *Science of the Total Environment*. 2012;424:16-38.

De Brouwere K, Cornelis C, Arvanitis A, Brown T, Crump D, Harrison P, et al. Application of the maximum cumulative ratio (MCR) as a screening tool for the evaluation of mixtures in residential indoor air. *Science of the Total Environment*. 2014;479:267-76.

de Gavelle E, de Lauzon-Guillain B, Charles MA, Chevrier C, Hulin M, Sirot V, et al. Chronic dietary exposure to pesticide residues and associated risk in the French ELFE cohort of pregnant women. *Environment International*. 2016;92-93:533-42.

deFur PL, Evans GW, Hubal EAC, Kyle AD, Morello-Frosch RA, Williams DR. Vulnerability as a function of individual and group resources in cumulative risk assessment. *Environmental Health Perspectives*. 2007;115(5):817-24.

Dellarco VL. Cumulative risk assessment of pesticides that share a common mechanism of toxicity. *Toxicology*. 2002;178(1):36-7.

Dewalque L, Charlier C, Pirard C. Estimated daily intake and cumulative risk assessment of phthalate diesters in a Belgian general population. *Toxicology Letters*. 2014;231(2):161-8.

Dewalque L, Pirard C, Vandepaer S, Charlier C. Temporal variability of urinary concentrations of phthalate metabolites, parabens and benzophenone-3 in a Belgian adult population. *Environmental Research*. 2015;142:414-23.

Diao PP, Chen Q, Wang R, Sun D, Cai ZP, Wu H, et al. Phenolic endocrine-disrupting compounds in the Pearl River Estuary: Occurrence, bioaccumulation and risk assessment. *Science of the Total Environment*. 2017;584:1100-7.

Dibo APA, Noble BF, Sanchez LE. Perspectives on Driving Changes in Project-based Cumulative Effects Assessment for Biodiversity: Lessons from the Canadian Experience. *Environmental Management*. 2018;62(5):929-41.

Diefenderfer HL, Johnson GE, Thom RM, Buenau KE, Weitkamp LA, Woodley CM, et al. Evidence-based evaluation of the cumulative effects of ecosystem restoration. *Ecosphere*. 2016;7(3).

Do DH, Walgraeve C, Amare AN, Barai KR, Parao AE, Demeestere K, et al. Airborne volatile organic compounds in urban and industrial locations in four developing countries. *Atmospheric Environment*. 2015;119:330-8.

Doherty CA, Galloway B, Curry RA, Munkittrick KR. Performance of white sucker populations along the Saint John River Main Stem, New Brunswick, Canada: An example of effects-based cumulative effects assessment. *Water Quality Research Journal of Canada*. 2005;40(3):361-73.

Domenech E, Martorell S. Assessment of safety margins of exposure to non-genotoxic chemical substances in food. *Food Control*. 2017;79:1-9.

Dong RH, Zhao SZ, Zhang H, Chen JS, Zhang MR, Wang M, et al. Sex Differences in the Association of Urinary Concentrations of Phthalates Metabolites with Self-Reported Diabetes and Cardiovascular Diseases in Shanghai Adults. *International Journal of Environmental Research and Public Health*. 2017;14(6).

Dong RH, Zheng JH, Zhang MR, Chen JS, Zhang H, Gao X, et al. The concentrations and cumulative risk assessment of phthalates in general population from Shanghai: The comparison between groups with different ages. *Science of the Total Environment*. 2018;637:871-80.

Dong R, Zheng J, Zhang M, Chen J, Zhang H, Gao X, et al. The concentrations and cumulative risk assessment of phthalates in general population from Shanghai: The comparison between groups with different ages. *The Science of the total environment*. 2018;637-638:871-80.

Dong XW, Zhang YB, Dong J, Zhao Y, Guo JP, Wang ZJ, et al. Urinary metabolomic profiling in rats exposed to dietary di(2-ethylhexyl) phthalate (DEHP) using ultra-performance liquid chromatography quadrupole time-of-flight tandem mass spectrometry (UPLC/Q-TOF-MS). *Environmental Science and Pollution Research*. 2017;24(20):16659-72.

Du P, Zhou ZL, Huang HM, Han S, Xu ZQ, Bai Y, et al. Estimating population exposure to phthalate esters in major Chinese cities through wastewater-based epidemiology. *Science of the Total Environment*. 2018;643:1602-9.

Dube M, Duinker P, Greig L, Carver M, Servos M, McMaster M, et al. A framework for assessing cumulative effects in watersheds: An introduction to

Canadian case studies. *Integrated Environmental Assessment and Management*. 2013;9(3):363-9.

Dube M, Johnson B, Dunn G, Culp J, Cash K, Munkittrick K, et al. Development of a new approach to cumulative effects assessment: A Northern River Ecosystem example. *Environmental Monitoring and Assessment*. 2006;113(1-3):87-115.

Dube M, Muldoon B, Wilson J, Maracle KB. Accumulated state of the Yukon River watershed: Part I critical review of literature. *Integrated Environmental Assessment and Management*. 2013;9(3):426-38.

Dube M, Munkittrick K. Integration of effects-based and stressor-based approaches into a holistic framework for cumulative effects assessment in aquatic ecosystems. *Human and Ecological Risk Assessment*. 2001;7(2):247-58.

Dube M, Wilson JE. Accumulated state assessment of the Peace-Athabasca-Slave River system. *Integrated Environmental Assessment and Management*. 2013;9(3):405-25.

Dube M, Wilson JE, Waterhouse J. Accumulated state assessment of the Yukon River watershed: Part II quantitative effects-based analysis integrating western science and traditional ecological knowledge. *Integrated Environmental Assessment and Management*. 2013;9(3):439-55.

Duggan A, Charnley G, Chen W, Chukwudebe A, Hawk R, Krieger RI, et al. Di-alkyl phosphate biomonitoring data: assessing cumulative exposure to organophosphate pesticides. *Regulatory Toxicology and Pharmacology*. 2003;37(3):382-95.

Duinker PN, Burbidge EL, Boardley SR, Greig LA. Scientific dimensions of cumulative effects assessment: toward improvements in guidance for practice. *Environmental Reviews*. 2013;21(1):40-52.

Duinker PN, Greig LA. The impotence of cumulative effects assessment in Canada: Ailments and ideas for redeployment. *Environmental Management*. 2006;37(2):153-61.

Duinker PN, Greig LA. Scenario analysis in environmental impact assessment: Improving explorations of the future. *Environmental Impact Assessment Review*. 2007;27(3):206-19.

Dyer RS. Chemical mixtures and health effects at Superfund sites. *International Journal of Hygiene and Environmental Health*. 2002;205(1-2):149-53.

Eberhard R, Johnston N, Everingham JA. A collaborative approach to address the cumulative impacts of mine-water discharge: Negotiating a cross-sectoral waterway partnership in the Bowen Basin, Australia. *Resources Policy*. 2013;38(4):678-87.

Eggers MJ, Doyle JT, Lefthand MJ, Young SL, Moore-Nall AL, Kindness L, et al. Community Engaged Cumulative Risk Assessment of Exposure to Inorganic Well Water Contaminants, Crow Reservation, Montana. *International Journal of Environmental Research and Public Health*. 2018;15(1).

Ekelund CK, Jorgensen FS, Petersen OB, Sundberg K, Tabor A, Danish Fetal Med Res G. Impact of a new national screening policy for Down's syndrome in Denmark: population based cohort study. *Bmj-British Medical Journal*. 2008;337.

Ekelund CK, Petersen OB, Skibsted L, Kjaergaard S, Vogel I, Tabor A, et al. First-trimester screening for trisomy 21 in Denmark: implications for detection and birth rates of trisomy 18 and trisomy 13. *Ultrasound in Obstetrics & Gynecology*. 2011;38(2):140-4.

Ekelund CK, Petersen OB, Sundberg K, Pedersen FH, Vogel I, Tabor A. Screening performance for trisomy 21 comparing first trimester combined screening and a first trimester contingent screening protocol including ductus venosus and tricuspid flow. *Prenatal Diagnosis*. 2012;32(8):783-8.

Elder DP, Harvey JS. Is there a Real Case for Cumulative Control of Structurally Related Genotoxic Impurities? *Organic Process Research & Development*. 2010;14(4):1037-45.

Ellickson KM, Sevcik SM, Burman S, Pak S, Kohlasch F, Pratt GC. Cumulative Risk Assessment and Environmental Equity in Air Permitting: Interpretation, Methods, Community Participation and Implementation of a Unique Statute. *International Journal of Environmental Research and Public Health*. 2011;8(11):4140-59.

Epp HT. Prediction to landscape restoration: Completing the environmental effects assessment cycle. In: Epp HT, editor. *Ecological Reclamation in Canada at Century's Turn*. Canadian Plains Proceedings. 281997. p. 1-9.

Erlewein A. Disappearing rivers - The limits of environmental assessment for hydropower in India. *Environmental Impact Assessment Review*. 2013;43:135-43.

Ermiler S, Scholze M, Kortenkamp A. Seven benzimidazole pesticides combined at sub-threshold levels induce micronuclei in vitro. *Mutagenesis*. 2013;28(4):417-26.

Esterhuyse S, Avenant M, Redelinghuys N, Kijko A, Glazewski J, Plit L, et al. Monitoring of unconventional oil and gas extraction and its policy implications: A case study from South Africa. *Energy Policy*. 2018;118:109-20.

European Food Safety A. Modification of the existing MRLs for triclopyr in various commodities of animal origin. *Efsa Journal*. 2009;7(11).

European Food Safety A. Modification of the existing MRLs for prothioconazole in various root vegetables. *Efsa Journal*. 2010;8(7).

European Food Safety A. REASONED OPINION Reasoned Opinion on the modification of the existing MRLs for malathion in various crops European Food Safety Authority. *Efsa Journal*. 2014;12(2).

Evans AM, Rice GE, Teuschler LK, Wright JM. Joint Exposure to Chemical and Nonchemical Neurodevelopmental Stressors in U. S. Women of Reproductive Age in NHANES. *International Journal of Environmental Research and Public Health*. 2014;11(4):4384-401.

Evans AM, Rice GE, Wright JM, Teuschler LK. Exploratory Cumulative Risk Assessment (CRA) Approaches Using Secondary Data. *Human and Ecological Risk Assessment*. 2014;20(3):704-23.

Evans GW, Becker FD, Zahn A, Bilotta E, Keese AM. Capturing the Ecology of Workplace Stress With Cumulative Risk Assessment. *Environment and Behavior*. 2012;44(1):136-54.

Evans RM, Martin OV, Faust M, Kortenkamp A. Should the scope of human mixture risk assessment span legislative/regulatory silos for chemicals? *Science of the Total Environment*. 2016;543:757-64.

Evans RM, Scholze M, Kortenkamp A. Examining the feasibility of mixture risk assessment: A case study using a tiered approach with data of 67 pesticides from the Joint FAO/WHO Meeting on Pesticide Residues (JMPR). *Food and Chemical Toxicology*. 2015;84:260-9.

Everingham JA. Transformations of Rural Society and Environments by Extraction of Mineral and Energy Resources. Shucksmith M, Brown DL, editors 2016. 272-84 p.

Faulkner RC, Farcas A, Merchant ND. Guiding principles for assessing the impact of underwater noise. *Journal of Applied Ecology*. 2018;55(6):2531-6.

Fenner-Crisp PA. FQPA science issues: common mechanism of toxicity and cumulative risk assessment. *Regulatory toxicology and pharmacology* : RTP. 2000;31(3):308-10.

Fernandes MDL, Esteves TC, Oliveira ER, Alves FL. How does the cumulative impacts approach support Maritime Spatial Planning? *Ecological Indicators*. 2017;73:189-202.

Fernandes MD, Quintela A, Alves FL. Identifying conservation priority areas to inform maritime spatial planning: A new approach. *Science of the Total Environment*. 2018;639:1088-98.

Fidler C, Noble B. Advancing strategic environmental assessment in the offshore oil and gas sector: Lessons from Norway, Canada, and the United Kingdom. *Environmental Impact Assessment Review*. 2012;34:12-21.

Filz KJ, Bohr A, Lotters S. Abandoned Foreigners: is the stage set for exotic pet reptiles to invade Central Europe? *Biodiversity and Conservation*. 2018;27(2):417-35.

Finley CG, Revel RD. Pipeline projects and cumulative effects assessment issues. GoodrichMahoney JW, Mutrie DF, Guild CA, editors 2002. 219-31 p.

Flanagan SV, Spayd SE, Procopio NA, Marvinney RG, Smith AE, Chillrud SN, et al. Arsenic in private well water part 3 of 3: Socioeconomic vulnerability to exposure in Maine and New Jersey. *Science of the Total Environment*. 2016;562:1019-30.

Foley MM, Mease LA, Martone RG, Praehler EE, Morrison TH, Murray CC, et al. The challenges and opportunities in cumulative effects assessment. *Environmental Impact Assessment Review*. 2017;62:122-34.

Fournier K, Baumont E, Glorennec P, Bonvallot N. Relative toxicity for indoor semi volatile organic compounds based on neuronal death. *Toxicology Letters*. 2017;279:33-42.

Fournier K, Glorennec P, Bonvallot N. An exposure-based framework for grouping pollutants for a cumulative risk assessment approach: Case study of indoor semi-volatile organic compounds. *Environmental Research*. 2014;130:20-8.

Fournier K, Tebby C, Zeman F, Glorennec P, Zmirou-Navier D, Bonvallot N. Multiple exposures to indoor contaminants: Derivation of benchmark doses and relative potency factors based on male reprotoxic effects. *Regulatory toxicology and pharmacology* : RTP. 2016;74:23-30.

Fox MA, Brewer LE, Martin L. An Overview of Literature Topics Related to Current Concepts, Methods, Tools, and Applications for Cumulative Risk Assessment (2007-2016). *International Journal of Environmental Research and Public Health*. 2017;14(4).

Fox MA, Groopman JD, Burke TA. Evaluating cumulative risk assessment for environmental justice: A community case study. *Environmental Health Perspectives*. 2002;110:203-9.

Fox MA, Spicer K, Chosewood LC, Susi P, Johns DO, Dotson GS. Implications of applying cumulative risk assessment to the workplace. *Environment International*. 2018;115:230-8.

Fox MA, Tran NL, Groopman JD, Burke TA. Toxicological resources for cumulative risk: an example with hazardous air pollutants. *Regulatory Toxicology and Pharmacology*. 2004;40(3):305-11.

Fox MA. Evaluating cumulative risk assessment for environmental justice: a community case study. *Environmental health perspectives*. 2002;110 Suppl 2:203-9.

Francis SR, Hamm J. Looking Forward: Using Scenario Modeling to Support Regional Land Use Planning in Northern Yukon, Canada. *Ecology and Society*. 2011;16(4).

Franks DM, Brereton D, Moran CJ. The cumulative dimensions of impact in resource regions. *Resources Policy*. 2013;38(4):640-7.

Frederiksen H, Jensen TK, Jorgensen N, Kyhl HB, Husby S, Skakkebk NE, et al. Human urinary excretion of non-persistent environmental chemicals: an overview of Danish data collected between 2006 and 2012. *Reproduction*. 2014;147(4):555-65.

Frederiksen H, Kuiri-Hanninen T, Main KM, Dunkel L, Sankilampi U. A Longitudinal Study of Urinary Phthalate Excretion in 58 Full-Term and 67 Preterm Infants from Birth through 14 Months. *Environmental Health Perspectives*. 2014;122(9):998-1005.

Frederiksen H, Nielsen JKS, Morck TA, Hansen PW, Jensen JF, Nielsen O, et al. Urinary excretion of phthalate metabolites, phenols and parabens in rural and urban Danish mother-child pairs. *International Journal of Hygiene and Environmental Health*. 2013;216(6):772-83.

Freeman AM, Kablinger AS, Patterson JC, Glabus MF. Cumulative risk assessment for prediction of development of schizophrenia. *Schizophrenia Research*. 2003;60(1):4-.

Frische T, Matezki S, Wogram J. Environmental risk assessment of pesticide mixtures under regulation 1107/2009/EC: a regulatory review by the German Federal Environment Agency (UBA). *Journal Fur Verbraucherschutz Und Lebensmittelsicherheit-Journal of Consumer Protection and Food Safety*. 2014;9(4):377-89.

Fromme H, Lahrz T, Kraft M, Fembacher L, Dietrich S, Sievering S, et al. Phthalates in German daycare centers: occurrence in air and dust and the excretion of their metabolites by children (LUPE 3). *Environment international*. 2013;61:64-72.

Gallagher SS, Rice GE, Scarano LJ, Teuschler LK, Bollweg G, Martin L. Cumulative risk assessment lessons learned: A review of case studies and issue papers. *Chemosphere*. 2015;120:697-705.

Galli R, Braun C. Integrative risk assessment of endocrine disruptors in Switzerland. *Chimia*. 2008;62(5):417-23.

Gao CJ, Liu LY, Ma WL, Ren NQ, Guo Y, Zhu NZ, et al. Phthalate metabolites in urine of Chinese young adults: Concentration, profile, exposure and cumulative risk assessment. *Science of the Total Environment*. 2016;543:19-27.

Gao DW, Li Z, Wang H, Liang H. An overview of phthalate acid ester pollution in China over the last decade: Environmental occurrence and human exposure. *Science of the Total Environment*. 2018;645:1400-9.

Gao H, Xu YY, Huang K, Ge X, Zhang YW, Yao HY, et al. Cumulative risk assessment of phthalates associated with birth outcomes in pregnant Chinese women: A prospective cohort study. *Environmental Pollution*. 2017;222:549-56.

Gao H, Zhu BB, Tao XY, Zhu YD, Tao XG, Tao FBA. Temporal Variability of Cumulative Risk Assessment on Phthalates in Chinese Pregnant Women: Repeated Measurement Analysis. *Environmental Science & Technology*. 2018;52(11):6585-91.

Gaudriault P, Mazaud-Guittot S, Lavoue V, Coiffec I, Lesne L, Dejucq-Rainsford N, et al. Endocrine Disruption in Human Fetal Testis Explants by Individual and Combined Exposures to Selected Pharmaceuticals, Pesticides, and Environmental Pollutants. *Environmental Health Perspectives*. 2017;125(8).

Ge HL, Liu SS, Su BX, Xu Z. Mathematical Derivation of Concentration Addition, Independent Action and Effect Summation Models. In: Xu N, Tian L, Dai F, editors. Sustainable Cities Development and Environment Protection, Pts 1-3. Applied Mechanics and Materials. 361-363 2013. p. 1054-+.

Ge HL, Liu SS, Su BX, Zhu XW. Two-Stage Prediction of the Effects of Imidazolium and Pyridinium Ionic Liquid Mixtures on Luciferase. *Molecules*. 2014;19(5):6877-90.

Geneletti D, Biasioli A, Morrison-Saunders A. Land take and the effectiveness of project screening in Environmental Impact Assessment: Findings from an empirical study. *Environmental Impact Assessment Review*. 2017;67:117-23.

Genisoglu M, Ergi-Kaymaz C, Sofuoglu SC. Multi-route - Multi-pathway exposure to trihalomethanes and associated cumulative health risks with response and dose addition. *Journal of Environmental Management*. 2019;233:823-31.

Gennings C, Shu H, Ruden C, Oberg M, Lindh C, Kiviranta H, et al. Incorporating regulatory guideline values in analysis of epidemiology data. *Environment International*. 2018;120:535-43.

Gibbs MT. The Changing Focus of the Ecological Risk Assessment of Aquaculture Operations: From Local to Cumulative Risk Assessment. *Human and Ecological Risk Assessment*. 2012;18(3):488-500.

Gies A, Kortenkamp A, Crofton K, Nielsen PJ, Foster P, Skakkebaek NE, et al. Combined exposures to anti-androgenic chemicals: steps towards cumulative risk assessment Panel discussion. *International Journal of Andrology*. 2010;33(2):472-4.

Giovanoulis G, Alves A, Papadopoulou E, Cousins AP, Schutze A, Koch HM, et al. Evaluation of exposure to phthalate esters and DINCH in urine and nails from a Norwegian study population. *Environmental Research*. 2016;151:80-90.

Go MJ, Hwang J-Y, Kim D-J, Lee H-J, Jang HB, Park K-H, et al. Effect of genetic predisposition on blood lipid traits using cumulative risk assessment in the Korean population. *Genomics & informatics*. 2012;10(2):99-105.

Gonzales FA, Jones RR, Deardorff J, Windham GC, Hiatt RA, Kushi LH. Neighborhood deprivation, race/ethnicity, and urinary metal concentrations among young girls in California. *Environment International*. 2016;91:29-39.

Greco WR. Evaluating chemical interaction studies for mixture risk assessment - Comments. *Human and Ecological Risk Assessment*. 2001;7(2):306-.

Greenfield BK, Rajan J, McKone TE. A multivariate analysis of CalEnviroScreen: comparing environmental and socioeconomic stressors versus chronic disease. *Environmental Health*. 2017;16.

Gregorio V, Buchi L, Anneville O, Rimet F, Bouchez A, Chevre N. Risk of herbicide mixtures as a key parameter to explain phytoplankton fluctuation in a great lake: the case of Lake Geneva, Switzerland. *Ecotoxicology*. 2012;21(8):2306-18.

Gregorio V, Chevre N. Assessing the risks posed by mixtures of chemicals in freshwater environments: case study of Lake Geneva, Switzerland. *Wiley Interdisciplinary Reviews-Water*. 2014;1(3):229-47.

Gregorio V, Chevre N, Junghans M. Critical issues in using the common mixture toxicity models concentration addition or response addition on species sensitivity distributions: A theoretical approach. *Environmental Toxicology and Chemistry*. 2013;32(10):2387-95.

Guliyev V, Hajiye N, Guliyev F. FACTORS AFFECTING AUDIT QUALITY IN CORPORATE SECTOR. In: Ibrahimov M, Aleksic A, Dukic D, editors. *Economic and Social Development. International Scientific Conference on Economic and Social Development* 2019. p. 813-21.

Gunn JAE, Noble BF. Sustainability considerations in regional environmental assessment. MorrisonSaunders A, Pope J, Bond A, editors 2015. 79-102 p.

Gunn J, Noble BF. Conceptual and methodological challenges to integrating SEA and cumulative effects assessment. *Environmental Impact Assessment Review*. 2011;31(2):154-60.

Gustavsson M, Kreuger J, Bundschuh M, Backhaus T. Pesticide mixtures in the Swedish streams: Environmental risks, contributions of individual compounds and consequences of single-substance oriented risk mitigation. *Science of the Total Environment*. 2017;598:973-83.

Habib H, Anceno AJ, Fiddes J, Beekma J, Ilyuschenko M, Nitivattananon V, et al. Jumpstarting post-conflict strategic water resources protection from a changing global perspective: Gaps and prospects in Afghanistan. *Journal of Environmental Management*. 2013;129:244-59.

Hachtel H, Vogel T, Graf M. Revision of the Basel catalogue for assessment of the legal prognosis (Dittmann list) Current version of the working instrument of the concordat expert committee of Northwest and Central Switzerland for

assessment of the danger to the public of offenders. *Forensische Psychiatrie Psychologie Kriminologie*. 2019;13(1):73-80.

Haddad S, Charest-Tardif G, Krishnan K. Physiologically based modeling of the maximal effect of metabolic interactions on the kinetics of components of complex chemical mixtures. *Journal of Toxicology and Environmental Health-Part A*. 2000;61(3):209-23.

Haddad S, Krishnan K. Physiological modeling of toxicokinetic interactions: Implications for mixture risk assessment. *Environmental Health Perspectives*. 1998;106:1377-84.

Hamernik K. General process for the risk assessment of pesticides that interact with or affect the endocrine system. *Pure and Applied Chemistry*. 2003;75(11-12):2531-4.

Han Z, Nie DX, Ediage EN, Yang XL, Wang JH, Chen B, et al. Cumulative health risk assessment of co-occurring mycotoxins. of deoxynivalenol and its acetyl derivatives in wheat and maize: Case study, Shanghai, China. *Food and Chemical Toxicology*. 2014;74:334-42.

Hanna K, McGuigan E, Noble B, Parkins J. An analysis of the state of impact assessment research for low carbon power production: Building a better understanding of information and knowledge gaps. *Energy Research & Social Science*. 2019;50:116-28.

Harron L, McCutcheon D, Asme. CUMULATIVE RISK ASSESSMENT CONCEPTUAL MODEL 2010. 551-+ p.

Hartmann C, Uhl M, Weiss S, Koch HM, Scharf S, König J. Human biomonitoring of phthalate exposure in Austrian children and adults and cumulative risk assessment. *International Journal of Hygiene and Environmental Health*. 2015;218(5):489-99.

Hass U, Christiansen S, Axelstad M, Scholze M, Boberg J. Combined exposure to low doses of pesticides causes decreased birth weights in rats. *Reproductive toxicology (Elmsford, NY)*. 2017;72:97-105.

Hegmann G, Eccles R, Strom K. Practical approach to assessing cumulative effects for pipelines. Goodrich Mahoney JW, Mutrie DF, Guild CA, editors 2002. 245-53 p.

Hegmann G, Yarranton GA. Alchemy to reason: Effective use of Cumulative Effects Assessment in resource management. *Environmental Impact Assessment Review*. 2011;31(5):484-90.

Helfand BT, Fought AJ, Loeb S, Meeks JJ, Kan DH, Catalona WJ. Genetic Prostate Cancer Risk Assessment: Common Variants in 9 Genomic Regions are Associated With Cumulative Risk. *Journal of Urology*. 2010;184(2):501-5.

Hendryx M, Luo JH. Latent class analysis of the association between polycyclic aromatic hydrocarbon exposures and body mass index. *Environment International*. 2018;121:227-31.

Hendryx M, Luo JH. Latent class analysis to model multiple chemical exposures among children. *Environmental Research*. 2018;160:115-20.

Hennig B, Ormsbee L, McClain CJ, Watkins BA, Blumberg B, Bachas LG, et al. Nutrition Can Modulate the Toxicity of Environmental Pollutants: Implications in Risk Assessment and Human Health. *Environmental Health Perspectives*. 2012;120(6):771-4.

Hennig B, Petriello MC, Gamble MV, Surh YJ, Kresty LA, Frank N, et al. The role of nutrition in influencing mechanisms involved in environmentally mediated diseases. *Reviews on Environmental Health*. 2018;33(1):87-97.

Hernandez AF, Gil F, Lacasana M. Toxicological interactions of pesticide mixtures: an update. *Archives of Toxicology*. 2017;91(10):3211-23.

Hernandez AF, Tsatsakis AM. Human exposure to chemical mixtures: Challenges for the integration of toxicology with epidemiology data in risk assessment. *Food and Chemical Toxicology*. 2017;103:188-93.

Hertzberg RC, MacDonell MM. Synergy and other ineffective mixture risk definitions. *Science of the Total Environment*. 2002;288(1-2):31-42.

Hertzberg RC, Pan Y, Li RS, Haber LT, Lyles RH, Herr DW, et al. A four-step approach to evaluate mixtures for consistency with dose addition. *Toxicology*. 2013;313(2-3):134-44.

Hertzberg RC, Teuschler LK. Evaluating quantitative formulas for dose-response assessment of chemical mixtures. *Environmental Health Perspectives*. 2002;110:965-70.

Hillbrand M. Homicide-suicide and other forms of co-occurring aggression against self and against others. *Professional Psychology-Research and Practice*. 2001;32(6):626-35.

Hines DE, Edwards SW, Conolly RB, Jarabek AM. A Case Study Application of the Aggregate Exposure Pathway (AEP) and Adverse Outcome Pathway (AOP) Frameworks to Facilitate the Integration of Human Health and

Ecological End Points for Cumulative Risk Assessment (CRA). *Environmental Science & Technology*. 2018;52(2):839-49.

Hinfray N, Tebby C, Piccini B, Bourguine G, Ait-Aissa S, Porcher JM, et al. Mixture Concentration-Response Modeling Reveals Antagonistic Effects of Estradiol and Genistein in Combination on Brain Aromatase Gene (*cyp19a1b*) in Zebrafish. *International Journal of Molecular Sciences*. 2018;19(4).

Ho E, Eger S, Courtenay SC. Assessing current monitoring indicators and reporting for cumulative effects integration: A case study in Muskoka, Ontario, Canada. *Ecological Indicators*. 2018;95:862-76.

Hodgson EE, Essington TE, Halpern BS. Density dependence governs when population responses to multiple stressors are magnified or mitigated. *Ecology*. 2017;98(10):2673-83.

Hodgson EE, Halpern BS. Investigating cumulative effects across ecological scales. *Conservation Biology*. 2019;33(1):22-32.

Holmstrup M, Bindesbol AM, Oostingh GJ, Duschl A, Scheil V, Kohler HR, et al. Interactions between effects of environmental chemicals and natural stressors: A review. *Science of the Total Environment*. 2010;408(18):3746-62.

Hotchkiss AK, Rider CV, Furr J, Howdeshell KL, Blystone CR, Wilson VS, et al. In utero exposure to an AR antagonist plus an inhibitor of fetal testosterone synthesis induces cumulative effects on F1 male rats. *Reproductive Toxicology*. 2010;30(2):261-70.

Howd RA. Considering Changes in Exposure and Sensitivity in an Early Life Cumulative Risk Assessment. *International Journal of Toxicology*. 2010;29(1):71-7.

Howdeshell KL, Hotchkiss AK, Gray LE. Cumulative effects of antiandrogenic chemical mixtures and their relevance to human health risk assessment. *International Journal of Hygiene and Environmental Health*. 2017;220(2):179-88.

Howdeshell KL, Rider CV, Wilson VS, Furr JR, Lambright CR, Gray LE. Dose Addition Models Based on Biologically Relevant Reductions in Fetal Testosterone Accurately Predict Postnatal Reproductive Tract Alterations by a Phthalate Mixture in Rats. *Toxicological Sciences*. 2015;148(2):488-502.

Hu D, Wang YX, Chen WJ, Zhang Y, Li HH, Xiong L, et al. Associations of phthalates exposure with attention deficits hyperactivity disorder: A case-control study among Chinese children. *Environmental Pollution*. 2017;229:375-85.

Huang HT, Barzyk TM. Connecting the Dots: Linking Environmental Justice Indicators to Daily Dose Model Estimates. *International Journal of Environmental Research and Public Health*. 2017;14(1).

Huang H, Barzyk TM. Connecting the Dots: Linking Environmental Justice Indicators to Daily Dose Model Estimates. *International journal of environmental research and public health*. 2016;14(1).

Huang Y, Lu WW, Chen B, You J, Wu M, Li SG. Phthalates in Commercial Chinese Rice Wines: Concentrations and the Cumulative Risk Assessment to Adult Males in Shanghai. *Biomedical and Environmental Sciences*. 2014;27(10):819-23.

Huo CY, Liu LY, Zhang ZF, Ma WL, Song WW, Li HL, et al. Phthalate Esters in Indoor Window Films in a Northeastern Chinese Urban Center: Film Growth and Implications for Human Exposure. *Environmental Science & Technology*. 2016;50(14):7743-51.

Ivanchenko O, Kharchenko V, Moroz B, Kabak L, Konovalenko S, Ieee. Risk Assessment of Critical Energy Infrastructure Considering Physical and Cyber Assets: Methodology and Models 2018. 225-8 p.

Jacob AL, Moore JW, Fox CH, Sunter EJ, Gauthier D, Westwood AR, et al. Cross-sectoral input for the potential role of science in Canada's environmental assessment. *Facets*. 2018;3:512-29.

Jakobsen TR, Clausen FB, Rode L, Dziegiel MH, Tabor A. Identifying mild and severe preeclampsia in asymptomatic pregnant women by levels of cell-free fetal DNA. *Transfusion*. 2013;53(9):1956-64.

Jasiak A. Ergonomic modernization in a selected automotive company. In: Ahram T, Karwowski W, Schmorow D, editors. 6th International Conference on Applied Human Factors and Ergonomics. *Procedia Manufacturing*. 32015. p. 4769-75.

Jeddi MZ, Rastkari N, Ahmadkhaniha R, Yunesian M. Endocrine disruptor phthalates in bottled water: daily exposure and health risk assessment in pregnant and lactating women. *Environmental Monitoring and Assessment*. 2016;188(9).

Jensen AF, Petersen A, Granby K. Cumulative risk assessment of the intake of organophosphorus and carbamate pesticides in the Danish diet. *Food additives and contaminants*. 2003;20(8):776-85.

Jensen BH, Petersen A, Nielsen E, Christensen T, Poulsen ME, Andersen JH. Cumulative dietary exposure of the population of Denmark to pesticides. *Food*

and chemical toxicology : an international journal published for the British Industrial Biological Research Association. 2015;83:300-7.

Joensen UN, Veyrand B, Antignac JP, Jensen MB, Petersen JH, Marchand P, et al. PFOS (perfluorooctanesulfonate) in serum is negatively associated with testosterone levels, but not with semen quality, in healthy men. *Human Reproduction*. 2013;28(3):599-608.

Johnson CJ. Identifying ecological thresholds for regulating human activity: Effective conservation or wishful thinking? *Biological Conservation*. 2013;168:57-65.

Johnson D, Lalonde K, McEachern M, Kenney J, Mendoza G, Buffin A, et al. Improving cumulative effects assessment in Alberta: Regional strategic assessment. *Environmental Impact Assessment Review*. 2011;31(5):481-3.

Jones CR, Lange E, Kang J, Tsuchiya A, Howell R, While A, et al. WindNet: Improving the impact assessment of wind power projects. *Aims Energy*. 2014;2(4):461-84.

Jones CR, Orr BJ, Eiser JR. When is enough, enough? Identifying predictors of capacity estimates for onshore wind-power development in a region of the UK. *Energy Policy*. 2011;39(8):4563-77.

Jones FC. Cumulative effects assessment: theoretical underpinnings and big problems. *Environmental Reviews*. 2016;24(2):187-204.

Jones FC, Plewes R, Murison L, MacDougall MJ, Sinclair S, Davies C, et al. Random forests as cumulative effects models: A case study of lakes and rivers in Muskoka, Canada. *Journal of Environmental Management*. 2017;201:407-24.

Jones FC, Sinclair S, Keller W. Benthic macroinvertebrate communities in five rivers of the Coastal Hudson Bay Lowland. *Polar Biology*. 2014;37(1):141-7.

Juan-Borras M, Domenech E, Escriche I. Mixture-risk-assessment of pesticide residues in retail polyfloral honey. *Food Control*. 2016;67:127-34.

Judd AD, Backhaus T, Goodsir F. An effective set of principles for practical implementation of marine cumulative effects assessment. *Environmental Science & Policy*. 2015;54:254-62.

Kalantari F, Bergkvist C, Berglund M, Fattore E, Glynn A, Hakansson H, et al. Establishment of the cumulative margin of exposure for a group of polychlorinated biphenyl (PCB) congeners using an improved approach that accounts for both variability and uncertainty. *Regulatory Toxicology and Pharmacology*. 2013;65(3):325-33.

Katz Y, Lustig S, Ben-Shlomo I, Kobiler D, Ben-Nathan D. Inhalation anesthetic-induced neuroinvasion by an attenuated strain of West Nile virus in mice. *Journal of medical virology*. 2002;66(4):576-80.

Kennedy MC, van der Voet H, Roelofs VJ, Roelofs W, Glass CR, de Boer WJ, et al. New approaches to uncertainty analysis for use in aggregate and cumulative risk assessment of pesticides. *Food and Chemical Toxicology*. 2015;79:54-64.

Kennon S, Price CP, Mills PG, MacCallum PK, Cooper J, Hooper J, et al. Cumulative risk assessment in unstable angina: clinical electrocardiographic, autonomic, and biochemical markers. *Heart*. 2003;89(1):36-41.

Khalil AB, Dina R, Meeran K, Bakir AM, Naqvi S, Al Tikritti A, et al. Indeterminate Thyroid Nodules: A Pragmatic Approach. *European Thyroid Journal*. 2018;7(1):39-43.

Kim J, Kim S. State of the art in the application of QSAR techniques for predicting mixture toxicity in environmental risk assessment. *Sar and Qsar in Environmental Research*. 2015;26(1):41-59.

Kim J, Kim S, Schaumann GE. A Case Study and a Computational Simulation of the European Union Draft Technical Guidance Documents for Chemical Safety Assessment of Mixtures: Limitations and a Tentative Alternative. *Journal of Occupational and Environmental Hygiene*. 2013;10(4):181-93.

Kim J, Kim S, Schaumann GE. Reliable predictive computational toxicology methods for mixture toxicity: toward the development of innovative integrated models for environmental risk assessment. *Reviews in Environmental Science and Bio-Technology*. 2013;12(3):235-56.

Klotz L. Casting a wider net for countermeasure R&D funding decisions. *Biosecurity and Bioterrorism-Biodefense Strategy Practice and Science*. 2007;5(4):313-8.

Knutsen HK, Alexander J, Barregard L, Bignami M, Bruschweiler B, Ceccatelli S, et al. Risk to human and animal health related to the presence of 4,15-diacetoxyscirpenol in food and feed. *Efsa Journal*. 2018;16(8).

Koch HM, Wittassek M, Bruning T, Angerer J, Heudorf U. Exposure to phthalates in 5-6 years old primary school starters in Germany-A human biomonitoring study and a cumulative risk assessment. *International Journal of Hygiene and Environmental Health*. 2011;214(3):188-95.

Koehler K, Latshaw M, Matte T, Kass D, Frumkin H, Fox M, et al. Building Healthy Community Environments: A Public Health Approach. *Public Health Reports*. 2018;133:35S-43S.

Koppe JG, Bartonova A, Bolte G, Bistrup ML, Busby C, Butter M, et al. Exposure to multiple environmental agents and their effect. *Acta Paediatrica*. 2006;95:106-13.

Kortenkamp A, Evans R, Martin OV. Assessing the feasibility of mixture risk assessment - Case studies with pesticides and environmental pollutants. *Toxicology Letters*. 2015;238(2):S20-S1.

Kortenkamp A, Faust M. Combined exposures to anti-androgenic chemicals: steps towards cumulative risk assessment. *International journal of andrology*. 2010;33(2):463-74.

Kostoff RN, Goumenou M, Tsatsakis A. The role of toxic stimuli combinations in determining safe exposure limits. *Toxicology Reports*. 2018;5:1169-72.

Koval'chuk NM, Omel'chuk ST. Cumulative risk assessment for consumers of agricultural crops polluted with one chemical class pesticide residues (case of triazole fungicides). *Likars'ka sprava*. 2011(7-8):37-43.

Kranich SK, Frederiksen H, Andersson AM, Jorgensen N. Estimated Daily Intake and Hazard Quotients and Indices of Phthalate Diesters for Young Danish Men. *Environmental Science & Technology*. 2014;48(1):706-12.

Kraus E, Nattiv A, Tenforde A, Kussman A, Barrack M, Kim B, et al. Preliminary Results from a Prospective Study Using the Female Athlete Triad Cumulative Risk Assessment. *Medicine and Science in Sports and Exercise*. 2017;49(5):1098-.

Kraus E, Tenforde AS, Nattiv A, Sainani KL, Kussman A, Deakins-Roche M, et al. Bone stress injuries in male distance runners: higher modified Female Athlete Triad Cumulative Risk Assessment scores predict increased rates of injury. *British Journal of Sports Medicine*. 2019;53(4):237-42.

Krishnan K, Haddad S, Beliveau M, Tardif R. Physiological modeling and extrapolation of pharmacokinetic interactions from binary to more complex chemical mixtures. *Environmental Health Perspectives*. 2002;110:989-94.

Krishnan K, Paterson J, Williams DT. Health risk assessment of drinking water contaminants in Canada: The applicability of mixture risk assessment methods. *Regulatory Toxicology and Pharmacology*. 1997;26(2):179-87.

Kristensen S, Noble BF, Patrick RJ. Capacity for Watershed Cumulative Effects Assessment and Management: Lessons from the Lower Fraser River Basin, Canada. *Environmental Management*. 2013;52(2):360-73.

Lambert JC, Lipscomb JC. Mode of action as a determining factor in additivity models for chemical mixture risk assessment. *Regulatory Toxicology and Pharmacology*. 2007;49(3):183-94.

Lapointe NWR, Cooke SJ, Imhof JG, Boisclair D, Casselman JM, Curry RA, et al. Principles for ensuring healthy and productive freshwater ecosystems that support sustainable fisheries. *Environmental Reviews*. 2014;22(2):110-34.

Laranjeira P. Chemical Mixtures - Is a Risk Assessment Actually Necessary? Arezes P, Baptista JS, Barroso MP, Carneiro P, Costa N, Melo R, et al., editors 2013. 258-9 p.

Larsen PB, Boberg J, Morck TA, Boyd HB. Cumulative risk assessment of chemical exposure of children/unborn children to endocrine disruptors and neurotoxic substances. *Toxicology Letters*. 2017;280:S307-S8.

Larsen RK, Osterlin C, Guia L. Do voluntary corporate actions improve cumulative effects assessment? Mining companies' performance on Sami lands. *Extractive Industries and Society-an International Journal*. 2018;5(3):375-83.

Larsen RK, Raitio K, Stinnerbom M, Wik-Karlsson J. Sami-state collaboration in the governance of cumulative effects assessment: A critical action research approach. *Environmental Impact Assessment Review*. 2017;64:67-76.

Larsson MO, Nielsen VS, Bjerre N, Laporte F, Cedergreen N. Refined assessment and perspectives on the cumulative risk resulting from the dietary exposure to pesticide residues in the Danish population. *Food and Chemical Toxicology*. 2018;111:207-67.

Larsson MO, Nielsen VS, Brandt CO, Bjerre N, Laporte F, Cedergreen N. Quantifying dietary exposure to pesticide residues using spraying journal data. *Food and Chemical Toxicology*. 2017;105:407-28.

Larsson MO, Sloth Nielsen V, Bjerre N, Laporte F, Cedergreen N. Refined assessment and perspectives on the cumulative risk resulting from the dietary exposure to pesticide residues in the Danish population. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2018;111:207-67.

Ledirac N, Bertomeu L, Bernier MC. Mode of action of carcinogenic nitrosamines and cumulative risk assessment. *Toxicology Letters*. 2014;229:S70-S.

Lee J, Lee JH, Kim CK, Thomsen M. Childhood exposure to DEHP, DBP and BBP under existing chemical management systems: A comparative study of sources of childhood exposure in Korea and in Denmark. *Environment International*. 2014;63:77-91.

Lentz TJ, Dotson GS, Williams PRD, Maier A, Gadagbui B, Pandalai SP, et al. Aggregate Exposure and Cumulative Risk Assessment--Integrating Occupational and Non-occupational Risk Factors. *Journal of occupational and environmental hygiene*. 2015;12 Suppl 1:S112-26.

Levy JI. Is Epidemiology the Key to Cumulative Risk Assessment ? *Risk Analysis*. 2008;28(6):1507-13.

Levy JI. Is Epidemiology the Key to Cumulative Risk Assessment? *Epidemiology*. 2008;19(6):S295-S.

Levy JI, Fabian MP, Peters JL. Meta-Analytic Approaches for Multistressor Dose-Response Function Development: Strengths, Limitations, and Case Studies. *Risk Analysis*. 2015;35(6):1040-9.

Lewis AS, Sax SN, Wason SC, Campleman SL. Non-Chemical Stressors and Cumulative Risk Assessment: An Overview of Current Initiatives and Potential Air Pollutant Interactions. *International Journal of Environmental Research and Public Health*. 2011;8(6):2020-73.

Li ZJ. Introducing relative potency quotient approach associated with probabilistic cumulative risk assessment to derive soil standards for pesticide mixtures. *Environmental Pollution*. 2018;242:198-208.

Li ZX, Nie JY, Lu ZQ, Xie HZ, Kang L, Chen QS, et al. Cumulative risk assessment of the exposure to pyrethroids through fruits consumption in China - Based on a 3-year investigation. *Food and Chemical Toxicology*. 2016;96:234-43.

Li Z, Nie J, Lu Z, Xie H, Kang L, Chen Q, et al. Cumulative risk assessment of the exposure to pyrethroids through fruits consumption in China - Based on a 3-year investigation. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2016;96:234-43.

Liess M, von der Ohe PC. Analyzing effects of pesticides on invertebrate communities in streams. *Environmental Toxicology and Chemistry*. 2005;24(4):954-65.

Lima AC, Wrona FJ. Multiple threats and stressors to the Athabasca River Basin: What do we know so far? *Science of the Total Environment*. 2019;649:640-51.

Lin YJ, Lin PP. Probabilistic Integrated Human Mixture Risk Assessment of Multiple Metals Through Seafood Consumption. *Risk Analysis*. 2019;39(2):426-38.

Lin YJ, Ling MP, Chen SC, Chen WY, Hsieh NH, Cheng YH, et al. Mixture risk assessment due to ingestion of arsenic, copper, and zinc from milkfish farmed in contaminated coastal areas. *Environmental Science and Pollution Research*. 2017;24(17):14616-26.

Linder SH, Sexton K. Conceptual Models for Cumulative Risk Assessment. *American Journal of Public Health*. 2011;101:S74-S81.

Linder SH, Sexton K. A Pathway to Linking Risk and Sustainability Assessments. *Toxics*. 2014;2(4):533-50.

Lioy PJ, Hauser R, Gennings C, Koch HM, Mirkes PE, Schwetz BA, et al. Assessment of phthalates/phthalate alternatives in children's toys and childcare articles: Review of the report including conclusions and recommendation of the Chronic Hazard Advisory Panel of the Consumer Product Safety Commission. *Journal of Exposure Science and Environmental Epidemiology*. 2015;25(4):343-53.

Liu JL, Ju XF, Zhang GQ, Li ZS, Sarek. Risk assessment of IAQ and uncertain analysis 2006. 639-+ p.

Liu YH, Yan ZY, Zhang Q, Song NH, Cheng J, Torres OL, et al. Urinary levels, composition profile and cumulative risk of bisphenols in preschool-aged children from Nanjing suburb, China. *Ecotoxicology and Environmental Safety*. 2019;172:444-50.

Livingstone D. Cumulative effects assessment and management in the northwest territories - Challenges and opportunities for supporting long-term sustainability. In: Knudsen EE, MacDonald DD, Muirhead YK, editors. *Sustainable Management of North American Fisheries*. American Fisheries Society Symposium. 432004. p. 231-42.

Lodhia S, Martin N, Rice J. One Stop Shopping as a regime: a crowdsourced analysis of integrated environmental approval policy. *Australasian Journal of Environmental Management*. 2018;25(4):420-38.

Lokke H. Novel methods for integrated risk assessment of cumulative stressors - Results from the NoMiracle project. *Science of the Total Environment*. 2010;408(18):3719-24.

Lokke H, Ragas AMJ, Holmstrup M. Tools and perspectives for assessing chemical mixtures and multiple stressors. *Toxicology*. 2013;313(2-3):73-82.

Long SM, Reichenberg F, Lister LJ, Hankard PK, Townsend J, Mayer P, et al. COMBINED CHEMICAL (FLUORANTHENE) AND DROUGHT EFFECTS ON LUMBRICUS RUBELLUS DEMONSTRATE THE APPLICABILITY OF THE INDEPENDENT ACTION MODEL FOR MULTIPLE STRESSOR ASSESSMENT. *Environmental Toxicology and Chemistry*. 2009;28(3):629-36.

Loxton EA, Schirmer J, Kanowski P. Exploring the social dimensions and complexity of cumulative impacts: a case study of forest policy changes in Western Australia. *Impact Assessment and Project Appraisal*. 2013;31(1):52-63.

Lu CL, Svoboda KR, Lenz KA, Pattison C, Ma HB. Toxicity interactions between manganese (Mn) and lead (Pb) or cadmium (Cd) in a model organism the nematode *C. elegans*. *Environmental Science and Pollution Research*. 2018;25(16):15378-89.

Ma DQ, Zhang LY, Fang QH, Jiang YW, Elliott M. The cumulative effects assessment of a coastal ecological restoration project in China: An integrated perspective. *Marine Pollution Bulletin*. 2017;118(1-2):254-60.

Ma MM, Chen C, Yang GL, Li Y, Chen ZJ, Qian YZ. Combined cytotoxic effects of pesticide mixtures present in the Chinese diet on human hepatocarcinoma cell line. *Chemosphere*. 2016;159:256-66.

MacDonell MM, Haroun LA, Teuschler LK, Rice GE, Hertzberg RC, Butler JP, et al. Cumulative Risk Assessment Toolbox: Methods and Approaches for the Practitioner. *Journal of Toxicology*. 2013.

MacDonell MM, Hertzberg RC, Rice GE, Wright JM, Teuschler LK. Characterizing Risk for Cumulative Risk Assessments. *Risk Analysis*. 2018;38(6):1183-201.

Maffini MV, Neltner TG. Brain drain: the cost of neglected responsibilities in evaluating cumulative effects of environmental chemicals. *Journal of Epidemiology and Community Health*. 2015;69(5):496-9.

Mahiny AS, Turner BJ. Cumulative effects assessment as a framework for prioritizing mitigation measures in remnants of vegetation. Li J, Jiang Q, Li M, Li Y, editors 2005. 418-26 p.

Marcotte D, Hung SK, Caquard S. Mapping cumulative impacts on Hong Kong's pink dolphin population. *Ocean & Coastal Management*. 2015;109:51-63.

Marcucci M, Lip GYH, Nieuwlaat R, Pisters R, Crijns H, Iorio A. Stroke and Bleeding Risk Co-distribution in Real-world Patients with Atrial Fibrillation: The Euro Heart Survey. *American Journal of Medicine*. 2014;127(10):979-U199.

Marshall S, Gennings C, Teuschler LK, Stork LG, Tornero-Velez R, Crofton KM, et al. An Empirical Approach to Sufficient Similarity: Combining Exposure Data and Mixtures Toxicology Data. *Risk Analysis*. 2013;33(9):1582-95.

Martin OV, Evans RM, Faust M, Kortenkamp A. A Human Mixture Risk Assessment for Neurodevelopmental Toxicity Associated with Polybrominated Diphenyl Ethers Used as Flame Retardants. *Environmental Health Perspectives*. 2017;125(8).

Martin OV, Martin S, Andreas K. Dispelling urban myths about default uncertainty factors in chemical risk assessment - sufficient protection against mixture effects? *Environmental Health*. 2013;12.

Masi P, Arlotti D, Alberti C, Helmholtz Centre Environmental R-U. On some numerical implications of the additive principle in Cumulative Risk Assessment 2008. 187-95 p.

Mayeno AN, Yang RSH, Reisfeld B. Biochemical reaction network modeling: Predicting metabolism of organic chemical mixtures. *Environmental Science & Technology*. 2005;39(14):5363-71.

Mazaris AD, Germond B. Bridging the gap between climate change and maritime security: Towards a comprehensive framework for planning. *Science of the Total Environment*. 2018;635:1076-80.

Meek MEB, Boobis AR, Crofton KM, Heinemeyer G, Raaij MV, Vickers C. Risk assessment of combined exposure to multiple chemicals: A WHO/IPCS framework. *Regulatory toxicology and pharmacology : RTP*. 2011.

Menegon S, Depellegrin D, Farella G, Gissi E, Ghezzi M, Sarretta A, et al. A modelling framework for MSP-oriented cumulative effects assessment. *Ecological Indicators*. 2018;91:171-81.

Menegon S, Depellegrin D, Farella G, Sarretta A, Venier C, Barbanti A. Addressing cumulative effects, maritime conflicts and ecosystem services threats through MSP-oriented geospatial webtools. *Ocean & Coastal Management*. 2018;163:417-36.

Menegon S, Sarretta A, Depellegrin D, Farella G, Venier C, Barbanti A. Tools4MSP: an open source software package to support Maritime Spatial Planning. *Peerj Computer Science*. 2018.

Menz J, Baginska E, Arrhenius A, Haiss A, Backhaus T, Kummerer K. Antimicrobial activity of pharmaceutical cocktails in sewage treatment plant effluent - An experimental and predictive approach to mixture risk assessment. *Environmental Pollution*. 2017;231:1507-17.

Menzie CA, MacDonell MM, Mumtaz M. A phased approach for assessing combined effects from multiple stressors. *Environmental Health Perspectives*. 2007;115(5):807-16.

Merchant ND, Faulkner RC, Martinez R. Marine Noise Budgets in Practice. *Conservation Letters*. 2018;11(3).

Mercier F, Gilles E, Saramito G, Glorennec P, Le Bot B. A multi-residue method for the simultaneous analysis in indoor dust of several classes of semi-volatile organic compounds by pressurized liquid extraction and gas chromatography/tandem mass spectrometry. *Journal of Chromatography A*. 2014;1336:101-11.

Mercier F, Glorennec P, Blanchard O, Le Bot B. Analysis of semi-volatile organic compounds in indoor suspended particulate matter by thermal desorption coupled with gas chromatography/mass spectrometry. *Journal of Chromatography A*. 2012;1254:107-14.

Meza-Montenegro MM, Gandolfi AJ, Santana-Alcantar ME, Klimecki WT, Aguilar-Apodaca MG, Del Rio-Salas R, et al. Metals in residential soils and cumulative risk assessment in Yaqui and Mayo agricultural valleys, northern Mexico. *Science of the Total Environment*. 2012;433:472-81.

Meza-Montenegro MM, Gandolfi AJ, Santana-Alcantar ME, Klimecki WT, Aguilar-Apodaca MG, Del Rio-Salas R, et al. Metals in residential soils and cumulative risk assessment in Yaqui and Mayo agricultural valleys, northern Mexico. *The Science of the total environment*. 2012;433:472-81.

Micheli F, De Leo G, Butner C, Martone RG, Shester G. A risk-based framework for assessing the cumulative impact of multiple fisheries. *Biological Conservation*. 2014;176:224-35.

Miltoft CB, Ekelund CK, Rode L, Tabor A. Women with chromosomally normal male fetuses are at increased risk of being referred for invasive testing

following first-trimester risk assessment. *Acta Obstetricia Et Gynecologica Scandinavica*. 2011;90(12):1446-9.

Miserendino RA, Bergquist BA, Adler SE, Jean R, Peter S, Velasquez-Lopez PC, et al. Challenges to measuring, monitoring, and addressing the cumulative impacts of artisanal and small-scale gold mining in Ecuador. *Resources Policy*. 2013;38(4):713-22.

Mishra N, Ayoko GA, Salthammer T, Morawska L. Evaluating the risk of mixtures in the indoor air of primary school classrooms. *Environmental Science and Pollution Research*. 2015;22(19):15080-8.

Mitchell E, Frisbie S, Sarkar B. Exposure to multiple metals from groundwater-a global crisis: Geology, climate change, health effects, testing, and mitigation. *Metallomics*. 2011;3(9):874-908.

Mitchell G. Mapping hazard from urban non-point pollution: a screening model to support sustainable urban drainage planning. *Journal of Environmental Management*. 2005;74(1):1-9.

Mitchell RE, Parkins JR. The Challenge of Developing Social Indicators for Cumulative Effects Assessment and Land Use Planning. *Ecology and Society*. 2011;16(2).

Mitro SD, Dodson RE, Singla V, Adarnkiewicz G, Elmi AF, Tilly MK, et al. Consumer Product Chemicals in Indoor Dust: A Quantitative Meta-analysis of US Studies. *Environmental Science & Technology*. 2016;50(19):10661-72.

Miyake K, Yang W, Hara K, Yasuda K, Horikawa Y, Osawa H, et al. Construction of a prediction model for type 2 diabetes mellitus in the Japanese population based on 11 genes with strong evidence of the association. *Journal of Human Genetics*. 2009;54(4):236-41.

Mohlenkamp S, Schmermund A, Kerkhoff G, Budde T, Erbel R. Prognostic value of noninvasive coronary plaque burden quantification in patients with risk factors. *Zeitschrift Fur Kardiologie*. 2003;92(5):351-+.

Mojsak P, Lozowicka B, Kaczynski P. Estimating acute and chronic exposure of children and adults to chlorpyrifos in fruit and vegetables based on the new, lower toxicology data. *Ecotoxicology and Environmental Safety*. 2018;159:182-9.

Moore JW. Bidirectional connectivity in rivers and implications for watershed stability and management. *Canadian Journal of Fisheries and Aquatic Sciences*. 2015;72(5):785-95.

Moos RK, Apel P, Schroter-Kermani C, Kolossa-Gehring M, Burning T, Koch HM. Daily intake and hazard index of parabens based upon 24h urine samples of the German Environmental Specimen Bank from 1995 to 2012. *Journal of Exposure Science and Environmental Epidemiology*. 2017;27(6):591-600.

Moran CJ, Brereton D. The use of aggregate complaints data as an indicator of cumulative social impacts of mining: A case study from the Hunter valley, NSW, Australia. *Resources Policy*. 2013;38(4):704-12.

Moran CJ, Franks DM, Sonter LJ. Using the multiple capitals framework to connect indicators of regional cumulative impacts of mining and pastoralism in the Murray Darling Basin, Australia. *Resources Policy*. 2013;38(4):733-44.

Moretto A, Bachman A, Boobis A, Solomon KR, Pastoor TP, Wilks MF, et al. A framework for cumulative risk assessment in the 21st century. *Critical Reviews in Toxicology*. 2017;47(2):85-97.

Moretto A, Di Renzo F, Giavini E, Metruccio F, Menegola E. The use of in vitro testing to refine cumulative assessment groups of pesticides: The example of teratogenic conazoles. *Food and Chemical Toxicology*. 2015;79:65-9.

Moschandrea DJ, Karuchit S. Scenario-model-parameter: a new method of cumulative risk uncertainty analysis. *Environment international*. 2002;28(4):247-61.

Moschandreas DJ, Karuchit S. Scenario-model-parameter: a new method of cumulative risk uncertainty analysis. *Environment International*. 2002;28(4):247-61.

Muller AK, Bosgra S, Boon PE, van der Voet H, Nielsen E, Ladefoged O. Probabilistic cumulative risk assessment of anti-androgenic pesticides in food. *Food and Chemical Toxicology*. 2009;47(12):2951-62.

Muller AK, Nielsen E. Probabilistic cumulative risk assessment of anti-androgenic pesticides in food. *Toxicology Letters*. 2008;180:S72-S.

Munkittrick KR, McMaster ME, Portt C, Gibbons WN, Farwell A, Ruemper L, et al. The development of cumulative effects assessment tools using fish populations. Scow KM, Fogg GE, Hinton DE, Johnson ML, editors 2000. 149-74 p.

N'Dri LA, White-Newsome JL, Corbin-Mark CD, Shepard PM. The Invisible Threat: Bisphenol-A and Phthalates in Environmental Justice Communities. *Environmental Justice*. 2015;8(1):15-9.

Naghavi M, Falk E. From Vulnerable Plaque to Vulnerable Patient. In: Naghavi M, editor. *Asymptomatic Atherosclerosis: Pathophysiology, Detection and Treatment*. Contemporary Cardiology 2010. p. 13-38.

Naghavi M, Libby P, Falk E, Casscells SW, Litovsky S, Rumberger J, et al. From vulnerable plaque to vulnerable patient - A call for new definitions and risk assessment strategies: Part I. *Circulation*. 2003;108(14):1664-72.

Naghavi M, Libby P, Falk E, Casscells SW, Litovsky S, Rumberger J, et al. From vulnerable plaque to vulnerable patient - A call for new definitions and risk assessment strategies: Part II. *Circulation*. 2003;108(15):1772-8.

Nair RS, Dudek BR, Grothe DR, Johannsen FR, Lamb IC, Martens MA, et al. Mixture risk assessment: A case study of Monsanto experiences. *Food and Chemical Toxicology*. 1996;34(11-12):1139-45.

Nasen LC, Noble BF, Johnstone JF. Environmental effects of oil and gas lease sites in a grassland ecosystem. *Journal of Environmental Management*. 2011;92(1):195-204.

Niu JY, Huang H, Chen N. Combined risk prediction in the water environment based on an MS-AR model and Copula theory. *Water Science and Technology*. 2013;67(9):1967-75.

Noble BF, Skwaruk JS, Patrick RJ. Toward cumulative effects assessment and management in the Athabasca watershed, Alberta, Canada. *Canadian Geographer-Geographe Canadien*. 2014;58(3):315-28.

Noble B, Basnet P. Capacity for watershed cumulative effects assessment and management in the South Saskatchewan Watershed, Canada. *Canadian Water Resources Journal*. 2015;40(2):187-203.

Noble B, Hill M, Nielsen J. Environmental assessment framework for identifying and mitigating the effects of linear development to wetlands. *Landscape and Urban Planning*. 2011;99(2):133-40.

Noble B, Ketilson S, Aitken A, Poelzer G. Strategic environmental assessment opportunities and risks for Arctic offshore energy planning and development. *Marine Policy*. 2013;39:296-302.

Noble B, Liu JL, Hackett P. The Contribution of Project Environmental Assessment to Assessing and Managing Cumulative Effects: Individually and Collectively Insignificant? *Environmental Management*. 2017;59(4):531-45.

Notte C, Allen DM, Gehman J, Alessi DS, Goss GG. Comparative analysis of hydraulic fracturing wastewater practices in unconventional shale

developments: Regulatory regimes. *Canadian Water Resources Journal*. 2017;42(2):122-37.

Ockleford C, Adriaanse P, Bennekou SH, Berny P, Brock T, Duquesne S, et al. Scientific opinion on pesticides in foods for infants and young children. *Efsa Journal*. 2018;16(6).

Ohlsson A, Ulleras E, Cedergreen N, Oskarsson A. Mixture effects of dietary flavonoids on steroid hormone synthesis in the human adrenocortical H295R cell line. *Food and Chemical Toxicology*. 2010;48(11):3194-200.

Olagunju AO, Gunn JAE. Selection of valued ecosystem components in cumulative effects assessment: lessons from Canadian road construction projects. *Impact Assessment and Project Appraisal*. 2015;33(3):207-19.

Olagunju A, Gunn JAE. Challenges to integrating planning and policy-making with environmental assessment on a regional scale - a multi-institutional perspective. *Impact Assessment and Project Appraisal*. 2016;34(3):236-53.

Olagunju A, Gunn JAE. Integration of environmental assessment with planning and policy-making on a regional scale: a literature review. *Environmental Impact Assessment Review*. 2016;61:68-77.

Olszynski MZP. Ancient Maxim, Modern Problems: De Minimis, Cumulative Environmental Effects and Risk-Based Regulation. *Queens Law Journal*. 2015;40(2):705-40.

Omrane F, Gargouri I, Khadhraoui M, Elleuch B, Zmirou-Navier D. Risk assessment of occupational exposure to heavy metal mixtures: a study protocol. *Bmc Public Health*. 2018;18.

Onukwufor JO, MacDonald N, Kibenge F, Stevens D, Kamunde C. Effects of hypoxia-cadmium interactions on rainbow trout (*Oncorhynchus mykiss*) mitochondrial bioenergetics: attenuation of hypoxia-induced proton leak by low doses of cadmium. *Journal of Experimental Biology*. 2014;217(6):831-40.

Orton F, Ermler S, Kugathas S, Rosivatz E, Scholze M, Kortenkamp A. Mixture effects at very low doses with combinations of anti-androgenic pesticides, antioxidants, industrial pollutant and chemicals used in personal care products. *Toxicology and Applied Pharmacology*. 2014;278(3):201-8.

Pack EC, Jang DY, Kim HS, Lee SH, Kim HY, Song SH, et al. Mixture risk assessment of selected mainstream cigarette smoke constituents generated from low-yield cigarettes in South Korean smokers. *Regulatory Toxicology and Pharmacology*. 2018;94:152-62.

Paez YC, Betancourt CA, Gonzalez-Sanson G. Reproductive and morphological indicators of the fish *Gambusia puncticulata* (Poeciliidae) in very polluted sections of Almendares River, Cuba. *Revista De Biologia Tropical*. 2008;56(4):1991-2004.

Paiva L, Providencia R, Barra SN, Dinis P, Faustino AC, Costa M, et al. Improving risk stratification in non-ST-segment elevation myocardial infarction with combined assessment of GRACE and CRUSADE risk scores. *Archives of Cardiovascular Diseases*. 2014;107(12):681-9.

Parker S, Cocklin C. THE USE OF GEOGRAPHICAL INFORMATION-SYSTEMS FOR CUMULATIVE ENVIRONMENTAL-EFFECTS ASSESSMENT. *Computers Environment and Urban Systems*. 1993;17(5):393-407.

Parkins JR. Deliberative Democracy, Institution Building, and the Pragmatics of Cumulative Effects Assessment. *Ecology and Society*. 2011;16(3).

Paulsen C, Crist PJ, Kittel G, Varley I. Regionwide Cumulative Effects Analysis of Long-Range Transportation Plans. *Transportation Research Record*. 2010(2158):10-8.

Payne-Sturges DC, Scammell MK, Levy JI, Cory-Slechta DA, Symanski E, Shmool JLC, et al. Methods for Evaluating the Combined Effects of Chemical and Nonchemical Exposures for Cumulative Environmental Health Risk Assessment. *International Journal of Environmental Research and Public Health*. 2018;15(12).

Pelletier M, Bonvallot N, Glorennec P. Aggregating exposures & cumulating risk for semivolatile organic compounds: A review. *Environmental Research*. 2017;158:649-59.

Pelletier M, Bonvallot N, Ramalho O, Mandin C, Wei WJ, Raffy G, et al. Indoor residential exposure to semivolatile organic compounds in France. *Environment International*. 2017;109:81-8.

Pelletier M, Glorennec P, Mandin C, Le Bot B, Ramalho O, Mercier F, et al. Chemical-by-chemical and cumulative risk assessment of residential indoor exposure to semivolatile organic compounds in France. *Environment International*. 2018;117:22-32.

Perdicoulis A, Piper J. Network and system diagrams revisited: Satisfying CEA requirements for causality analysis. *Environmental Impact Assessment Review*. 2008;28(7):455-68.

Peris-Sampedro F, Reverte I, Basaure P, Cabre M, Domingo JL, Colomina MT. Apolipoprotein E (APOE) genotype and the pesticide chlorpyrifos modulate attention, motivation and impulsivity in female mice in the 5-choice serial reaction time task. *Food and Chemical Toxicology*. 2016;92:224-35.

Perla ME, Rue T, Cheadle A, Krieger J, Karr CK. Population-Based Comparison of Biomarker Concentrations for Chemicals of Concern Among Latino-American and Non-Hispanic White Children. *Journal of Immigrant and Minority Health*. 2015;17(3):802-19.

Peters JL, Fabian MP, Levy JI. Combined impact of lead, cadmium, polychlorinated biphenyls and non-chemical risk factors on blood pressure in NHANES. *Environmental Research*. 2014;132:93-9.

Pollock MS, Dube MG, Schryer R. Investigating the link between pulp mill effluent and endocrine disruption: attempts to explain the presence of intersex fish in the Wabigoon River, Ontario, Canada. *Environmental toxicology and chemistry*. 2010;29(4):952-65.

Pop A, Drugan T, Gutleb AC, Lupu D, Cherfan J, Loghin F, et al. Estrogenic and anti-estrogenic activity of butylparaben, butylated hydroxyanisole, butylated hydroxytoluene and propyl gallate and their binary mixtures on two estrogen responsive cell lines (T47D-Kbluc, MCF-7). *Journal of Applied Toxicology*. 2018;38(7):944-57.

Pope C, Karanth S, Liu J. Pharmacology and toxicology of cholinesterase inhibitors: uses and misuses of a common mechanism of action. *Environmental Toxicology and Pharmacology*. 2005;19(3):433-46.

Porter M, Franks DM, Everingham JA. Cultivating collaboration: Lessons from initiatives to understand and manage cumulative impacts in Australian resource regions. *Resources Policy*. 2013;38(4):657-69.

Posthuma L, Brown CD, de Zwart D, Diamond J, Dyer SD, Holmes CM, et al. Prospective mixture risk assessment and management prioritizations for river catchments with diverse land uses. *Environmental Toxicology and Chemistry*. 2018;37(3):715-28.

Pradhan N, Habib H, Venkatappa M, Ebberts T, Duboz R, Shipin O. Framework tool for a rapid cumulative effects assessment: case of a prominent wetland in Myanmar. *Environmental monitoring and assessment*. 2015;187(6):341.

Prats P, Rodriguez I, Comas C, Puerto B. First trimester risk assessment for trisomy 21 in twin pregnancies combining nuchal translucency and first trimester biochemical markers. *Prenatal Diagnosis*. 2012;32(10):927-32.

Price PS, Han XL. Maximum Cumulative Ratio (MCR) as a Tool for Assessing the Value of Performing a Cumulative Risk Assessment. *International Journal of Environmental Research and Public Health*. 2011;8(6):2212-25.

Purchase IFH. Risk assessment. Principles and consequences. *Pure and Applied Chemistry*. 2000;72(6):1051-6.

Quignot N, Wiecek W, Amzal B, Dorne JL. The Yin-Yang of CYP3A4: a Bayesian meta-analysis to quantify inhibition and induction of CYP3A4 metabolism in humans and refine uncertainty factors for mixture risk assessment. *Archives of Toxicology*. 2019;93(1):107-19.

Quijano L, Yusa V, Font G, Pardo O. Chronic cumulative risk assessment of the exposure to organophosphorus, carbamate and pyrethroid and pyrethrin pesticides through fruit and vegetables consumption in the region of Valencia (Spain). *Food and Chemical Toxicology*. 2016;89:39-46.

Quinonez-Pinon R, Mendoza-Duran A, Valeo C. Design of an environmental monitoring program using NDVI and cumulative effects assessment. *International Journal of Remote Sensing*. 2007;28(7-8):1643-64.

Ragas AMJ, Oldenkamp R, Preeker NL, Wernicke J, Schlink U. Cumulative risk assessment of chemical exposures in urban environments. *Environment International*. 2011;37(5):872-81.

Rehhausen A, Koppel J, Scholles F, Stemmer B, Syrbe RU, Magel I, et al. Quality of federal level strategic environmental assessment - A case study analysis for transport, transmission grid and maritime spatial planning in Germany. *Environmental Impact Assessment Review*. 2018;73:41-59.

Reich H, Brocca D, Dujardin B, Bergman P, Fontier H. EFSA's contribution to the implementation of the EU legislation on pesticide residues in food. *Efsa Journal*. 2012;10(10).

Reiler E, Jors E, Baelum J, Huici O, Caero MMA, Cedergreen N. The influence of tomato processing on residues of organochlorine and organophosphate insecticides and their associated dietary risk. *Science of the Total Environment*. 2015;527:262-9.

Reiss R, Chang ET, Richardson RJ, Goodman M. A review of epidemiologic studies of low-level exposures to organophosphorus insecticides in non-occupational populations. *Critical Reviews in Toxicology*. 2015;45(7):531-641.

Rice G, MacDonell M, Hertzberg RC, Teuschler L, Picel K, Butler J, et al. An approach for assessing human exposures to chemical mixtures in the environment. *Toxicology and Applied Pharmacology*. 2008;233(1):126-36.

Rider CV, Boekelheide K, Catlin N, Gordon CJ, Morata T, Selgrade MK, et al. Cumulative Risk: Toxicity and Interactions of Physical and Chemical Stressors. *Toxicological Sciences*. 2014;137(1):3-11.

Rider CV, Carlin DJ, DeVito MJ, Thompson CL, Walker NJ. Mixtures research at NIEHS: An evolving program. *Toxicology*. 2013;313(2-3):94-102.

Rider CV, Dourson ML, Hertzberg RC, Mumtaz MM, Price PS, Simmons JE. Incorporating Nonchemical Stressors Into Cumulative Risk Assessments. *Toxicological Sciences*. 2012;127(1):10-7.

Rocha BA, Asimakopoulos AG, Barbosa F, Kannan K. Urinary concentrations of 25 phthalate metabolites in Brazilian children and their association with oxidative DNA damage. *Science of the Total Environment*. 2017;586:152-62.

Rodder D, Nekum S, Cord AF, Engler JO. Coupling Satellite Data with Species Distribution and Connectivity Models as a Tool for Environmental Management and Planning in Matrix-Sensitive Species. *Environmental Management*. 2016;58(1):130-43.

Rodea-Palomares I, Gonzalez-Pleiter M, Martin-Betancor K, Rosal R, Fernandez-Pinas F. Additivity and Interactions in Ecotoxicity of Pollutant Mixtures: Some Patterns, Conclusions, and Open Questions. *Toxics*. 2015;3(4):342-69.

Rodricks JV, Levy JJ. Science and Decisions: Advancing Toxicology to Advance Risk Assessment. *Toxicological Sciences*. 2013;131(1):1-8.

Roggero M. All in the same boat: externalities, interdependence and the commons of Venice lagoon. *Maritime Studies*. 2017;16.

Rolfe J. Predicting the economic and demographic impacts of long distance commuting in the resources sector: A Surat basin case study. *Resources Policy*. 2013;38(4):723-32.

Rosen MB, Wilson VS, Schmid JE, Gray LE. Gene expression analysis in the ventral prostate of rats exposed to vinclozolin or procymidone. *Reproductive Toxicology*. 2005;19(3):367-79.

Rotter S, Beronius A, Boobis AR, Hanberg A, van Klaveren J, Luijten M, et al. Overview on legislation and scientific approaches for risk assessment of combined exposure to multiple chemicals: the potential EuroMix contribution. *Critical Reviews in Toxicology*. 2018;48(9):796-814.

Russell JS. The case for including Integrated Land Management within forest management plans: An opinion. *Forestry Chronicle*. 2008;84(3):369-74.

Ryan PB, Burke TA, Hubal EAC, Cura JJ, McKone TE. Using biomarkers to inform cumulative risk assessment. *Environmental Health Perspectives*. 2007;115(5):833-40.

Saillenfait AM, Sabate JP, Robert A, Rouiller-Fabre V, Roudot AC, Moison D, et al. Dose-dependent alterations in gene expression and testosterone production in fetal rat testis after exposure to di-n-hexyl phthalate. *Journal of Applied Toxicology*. 2013;33(9):1027-35.

Sambuceti G, Marini C, Morbelli S, Paoli G, Derchi M, Pomposelli E. Witnessing ischemia or proofing coronary atherosclerosis: two different windows on the same or on different pathways precipitating cardiovascular events? *Journal of Nuclear Cardiology*. 2009;16(3):447-55.

Sanchez LE. Cumulative effects assessment and management: principles, processes and practices. *Impact Assessment and Project Appraisal*. 2016;34(4):359-.

Seeger B, Klawonn F, Bekale BN, Steinberg P. Mixture Effects of Estrogenic Pesticides at the Human Estrogen Receptor alpha and beta. *Plos One*. 2016;11(1).

Segal D, Lin YS, Ginsberg G, Sonawane B. A Conceptual Framework for Evaluating the Interaction of a Chemical and Nonchemical Stressor in Human Health Risk Assessments: A Case Study for Lead and Psychosocial Stress. *Human and Ecological Risk Assessment*. 2015;21(7):1840-68.

Seitz NE, Westbrook CJ, Dube MG, Squires AJ. Assessing large spatial scale landscape change effects on water quality and quantity response in the lower Athabasca River basin. *Integrated Environmental Assessment and Management*. 2013;9(3):392-404.

Seitz NE, Westbrook CJ, Noble BF. Bringing science into river systems cumulative effects assessment practice. *Environmental Impact Assessment Review*. 2011;31(3):172-9.

Senner R. Appraising the sustainability of project alternatives: An increasing role for cumulative effects assessment. *Environmental Impact Assessment Review*. 2011;31(5):502-5.

Sexton K. Cumulative Risk Assessment: An Overview of Methodological Approaches for Evaluating Combined Health Effects from Exposure to Multiple Environmental Stressors. *International Journal of Environmental Research and Public Health*. 2012;9(2):370-90.

Sexton K. Cumulative Health Risk Assessment: Finding New Ideas and Escaping from the Old Ones. *Human and Ecological Risk Assessment*. 2015;21(4):934-51.

Sexton K, Hattis D. Assessing cumulative health risks from exposure to environmental mixtures - Three fundamental questions. *Environmental Health Perspectives*. 2007;115(5):825-32.

Sexton K, Linder SH. The Role of Cumulative Risk Assessment in Decisions about Environmental Justice. *International Journal of Environmental Research and Public Health*. 2010;7(11):4037-49.

Sexton K, Linder SH. Cumulative Risk Assessment for Combined Health Effects From Chemical and Nonchemical Stressors. *American Journal of Public Health*. 2011;101:S81-S8.

Sexton K, Ryan AD. Using exposure biomarkers in children to compare between-child and within-child variance and calculate correlations among siblings for multiple environmental chemicals. *Journal of Exposure Science and Environmental Epidemiology*. 2012;22(1):16-23.

Sexton K, Salinas JJ, McDonald TJ, Gowen RMZ, Miller RP, McCormick JB, et al. BIOMARKER MEASUREMENTS OF PRENATAL EXPOSURE TO POLYCHLORINATED BIPHENYLS (PCB) IN UMBILICAL CORD BLOOD FROM POSTPARTUM HISPANIC WOMEN IN BROWNSVILLE, TEXAS. *Journal of Toxicology and Environmental Health-Part a-Current Issues*. 2013;76(22):1225-35.

Shackelford N, Standish RJ, Ripple W, Starzomski BM. Threats to biodiversity from cumulative human impacts in one of North America's last wildlife frontiers. *Conservation Biology*. 2018;32(3):672-84.

Shao Y, Chen ZL, Hollert H, Zhou SB, Deutschmann B, Seiler TB. Toxicity of 10 organic micropollutants and their mixture: Implications for aquatic risk assessment. *Science of the Total Environment*. 2019;666:1273-82.

Sheelanere P, Noble BF, Patrick RJ. Institutional requirements for watershed cumulative effects assessment and management: Lessons from a Canadian trans-boundary watershed. *Land Use Policy*. 2013;30(1):67-75.

Shen XB, Feng JY, Pu YP. Combined Effects Assessment of the Multiple Genes on Gastric Cancer Susceptibility. Wang XY, Zhang YR, Hong Q, Yu CY, Xin XP, Ding JY, editors 2010. 251-3 p.

Shi WM, Lin ZJ, Liao CX, Zhang JL, Liu W, Wang XY, et al. Urinary phthalate metabolites in relation to childhood asthmatic and allergic symptoms in Shanghai. *Environment International*. 2018;121:276-86.

Shi W, Xia J. Combined risk assessment of nonstationary monthly water quality based on Markov chain and time-varying copula. *Water Science and Technology*. 2017;75(3):693-704.

Shmool JLC, Yonas MA, Newman OD, Kubzansky LD, Joseph E, Parks A, et al. Identifying Perceived Neighborhood Stressors Across Diverse Communities in New York City. *American Journal of Community Psychology*. 2015;56(1-2):145-55.

Sielken RL. Risk metrics and cumulative risk assessment methodology for the FQPA. *Regulatory Toxicology and Pharmacology*. 2000;31(3):300-7.

Sielken RL. Probabilistic Approaches to Aggregate and Cumulative Risk Assessment. Franklin CA, Worgan JP, editors 2005. 275-316 p.

Simmons J, Gennings C, Casey M, Plewa MJ, Wagner ED, Carter WH, et al. Designing studies and collecting data useful for cumulative risk assessment. *Toxicological Sciences*. 2003;72:7-.

Sinclair AJ, Doelle M, Duinker PN. Looking up, down, and sideways: Reconceiving cumulative effects assessment as a mindset. *Environmental Impact Assessment Review*. 2017;62:183-94.

Singh SP, Dwivedi N, Raju KSR, Taneja I, Wahajuddin M. Validation of a Rapid and Sensitive UPLC-MS-MS Method Coupled with Protein Precipitation for the Simultaneous Determination of Seven Pyrethroids in 100 μ L of Rat Plasma by Using Ammonium Adduct as Precursor Ion. *Journal of Analytical Toxicology*. 2016;40(3):213-21.

Sizo A, Noble B, Bell S. Futures Analysis of Urban Land Use and Wetland Change in Saskatoon, Canada: An Application in Strategic Environmental Assessment. *Sustainability*. 2015;7(1):811-30.

Sizo A, Noble B, Bell S. Strategic Environmental Assessment Framework for Landscape-Based, Temporal Analysis of Wetland Change in Urban Environments. *Environmental Management*. 2016;57(3):696-710.

Smith MT, de la Rosa R, Daniels SI. Using exposomics to assess cumulative risks and promote health. *Environmental and Molecular Mutagenesis*. 2015;56(9):715-23.

Soderlund DM, Clark JM, Sheets LP, Mullin LS, Piccirillo VJ, Sargent D, et al. Mechanisms of pyrethroid neurotoxicity: implications for cumulative risk assessment. *Toxicology*. 2002;171(1):3-59.

Soeborg T, Frederiksen H, Andersson AM. Cumulative risk assessment of phthalate exposure of Danish children and adolescents using the hazard index approach. *International journal of andrology*. 2012;35(3):245-52.

Solecki RA. Regulatory challenges and methodological aspect for cumulative risk assessment. *Toxicology Letters*. 2015;238(2):S9-S.

Solomon KR, Wilks MF, Bachman A, Boobis A, Moretto A, Pastoor TP, et al. Problem formulation for risk assessment of combined exposures to chemicals and other stressors in humans. *Critical Reviews in Toxicology*. 2016;46(10):835-44.

Solomon K, Wilks M, Moretto A, Boobis A, Philips R, Pastoor T, et al. Cumulative risk assessment for human health: Asking the right questions. *Abstracts of Papers of the American Chemical Society*. 2013;246.

Sonter LJ, Moran CJ, Barrett DJ. Modeling the impact of revegetation on regional water quality: A collective approach to manage the cumulative impacts of mining in the Bowen Basin, Australia. *Resources Policy*. 2013;38(4):670-7.

Spaling H, Smit B. CUMULATIVE ENVIRONMENTAL-CHANGE - CONCEPTUAL FRAMEWORKS, EVALUATION APPROACHES, AND INSTITUTIONAL PERSPECTIVES. *Environmental Management*. 1993;17(5):587-600.

Spanakis EG, Chiarugi F, Kouroubali A, Spat S, Beck P, Asanin S, et al. Diabetes Management Using Modern Information and Communication Technologies and New Care Models. *Interactive Journal of Medical Research*. 2012;1(2):15-26.

Squires AJ, Dube MG. Development of an effects-based approach for watershed scale aquatic cumulative effects assessment. *Integrated Environmental Assessment and Management*. 2013;9(3):380-91.

Squires AJ, Westbrook CJ, Dube MG. An approach for assessing cumulative effects in a model river, the Athabasca River basin. *Integrated environmental assessment and management*. 2010;6(1):119-34.

St Pierre DK. Evaluation of an Environmental Impact Statement for the Environmental Impact Assessment Report for Modifications to the Petitcodiac River Causeway. *Dalhousie Journal of Interdisciplinary Management*. 2014;10(1).

Staal YCM, Meijer J, van der Kris RJC, de Bruijn AC, Boersma AY, Gremmer ER, et al. Head skeleton malformations in zebrafish (*Danio rerio*) to assess adverse effects of mixtures of compounds. *Archives of Toxicology*. 2018;92(12):3549-64.

Stein B, Michalski B, Martin S, Pfeil R, Ritz V, Solecki R. Human health risk assessment from combined exposure in the framework of plant protection products and biocidal products. *Journal Fur Verbraucherschutz Und Lebensmittelsicherheit-Journal of Consumer Protection and Food Safety*. 2014;9(4):367-76.

Steindorf K, Tobiasz-Adamczyk B, Popiela T, Jedrychowski W, Penar A, Matyja A, et al. Combined risk assessment of physical activity and dietary habits on the development of colorectal cancer. A hospital-based case-control study in Poland. *European Journal of Cancer Prevention*. 2000;9(5):309-16.

Stelzenmuller V, Coll M, Mazaris AD, Giakoumi S, Katsanevakis S, Portman ME, et al. A risk-based approach to cumulative effect assessments for marine management. *The Science of the total environment*. 2018;612:1132-40.

Sumpter JP, Johnson AC, Williams RJ, Kortenkamp A, Scholze M. Modeling effects of mixtures of endocrine disrupting chemicals at the river catchment scale. *Environmental Science & Technology*. 2006;40(17):5478-89.

Sutherland GD, Waterhouse FL, Smith J, Saunders SC, Paige K, Malt J. Developing a systematic simulation-based approach for selecting indicators in strategic cumulative effects assessments with multiple environmental valued components. *Ecological Indicators*. 2016;61:512-25.

Tamis JE, de Vries P, Jongbloed RH, Lagerveld S, Jak RG, Karman CC, et al. Toward a Harmonized Approach for Environmental Assessment of Human

Activities in the Marine Environment. Integrated Environmental Assessment and Management. 2016;12(4):632-42.

Tan YM, Clewell H, Campbell J, Andersen M. Evaluating Pharmacokinetic and Pharmacodynamic Interactions with Computational Models in Supporting Cumulative Risk Assessment. International Journal of Environmental Research and Public Health. 2011;8(5):1613-30.

Tan Y-M, Leonard JA, Edwards S, Teeguarden J, Paini A, Egeghy P. Aggregate Exposure Pathways in Support of Risk Assessment. Current opinion in toxicology. 2018;9:8-13.

Taymaz H, Erarslan S, Oner ET, Alkan T, Agirbasli M, Kirdar B. Sequence variations within the genes related to hemostatic imbalance and their impact on coronary artery disease in Turkish population. Thrombosis Research. 2007;119(1):55-62.

Tenforde AS, Carlson JL, Chang A, Sainani KL, Shultz R, Kim JH, et al. Association of the Female Athlete Triad Risk Assessment Stratification to the Development of Bone Stress Injuries in Collegiate Athletes. American Journal of Sports Medicine. 2017;45(2):302-10.

Terron A, Hirsch-Ernst KI, Mohimont L, Steinkellner H. The relevance of combined action of chemicals through dissimilar modes of action. A science based approach for performing cumulative risk assessment of pesticides residues. Toxicology Letters. 2014;229:S19-S.

Teuschler LK, Rice GE, Wilkes CR, Lipscomb JC, Power FW. Feasibility study of cumulative risk assessment methods for drinking water disinfection by-product mixtures. Journal of Toxicology and Environmental Health-Part a-Current Issues. 2004;67(8-10):755-77.

Therivel R, Ross B. Cumulative effects assessment: Does scale matter? Environmental Impact Assessment Review. 2007;27(5):365-85.

Thorne JH, Huber PR, O'Donoghue E, Santos MJ. The use of regional advance mitigation planning (RAMP) to integrate transportation infrastructure impacts with sustainability; a perspective from the USA. Environmental Research Letters. 2014;9(6).

Thurman NC, Costello K. Modeling the drinking water exposure component for the organophosphate pesticide cumulative risk assessment. Abstracts of Papers of the American Chemical Society. 2004;228:U106-U.

Thurman NC, Young D. AGRO 192-Application of spatial analysis in estimating drinking water exposure for the N-methyl carbamate cumulative risk assessment. Abstracts of Papers of the American Chemical Society. 2007;233:310-.

Tian DY, Mao HC, Lv HC, Zheng Y, Peng CH, Hou SG. Novel two-tiered approach of ecological risk assessment for pesticide mixtures based on joint effects. Chemosphere. 2018;192:362-71.

Traore T, Bechaux C, Sirot V, Crepet A. To which chemical mixtures is the French population exposed? Mixture identification from the second French Total Diet Study. Food and Chemical Toxicology. 2016;98:179-88.

Tricker RC. Assessing cumulative environmental effects from major public transport projects. Transport Policy. 2007;14(4):293-305.

Tsai YA, Lin CL, Hou JW, Huang PC, Lee MC, Chen BH, et al. Effects of high di(2-ethylhexyl) phthalate (DEHP) exposure due to tainted food intake on pre-pubertal growth characteristics in a Taiwanese population. Environmental Research. 2016;149:197-205.

Tsatsakis AM, Kouretas D, Tzatzarakis MN, Stivaktakis P, Tsarouhas K, Golokhvast KS, et al. Simulating real-life exposures to uncover possible risks to human health: A proposed consensus for a novel methodological approach. Human & experimental toxicology. 2017;36(6):554-64.

Tseng CH, Chen LL, Yeh PC. Modeling contamination conditions in small-scale industrial areas to estimate health savings benefits associated with remediation. Heliyon. 2018;4(12).

Tsoutsis CS, Konstantinou IK, Hela DG. Organophosphorus pesticide residues in Greek virgin olive oil: levels, dietary intake and risk assessment. Food additives & contaminants Part A, Chemistry, analysis, control, exposure & risk assessment. 2008;25(10):1225-36.

Tsuji LJS, Manson H, Wainman BC, Vanspronsen EP, Shecapio-Blacksmith J, Rabbitskin T. Identifying potential receptors and routes of contaminant exposure in the traditional territory of the Ouje-Bougoumou Cree: Land use and a geographical information system. Environmental Monitoring and Assessment. 2007;127(1-3):293-306.

Ulrich N, Bury D, Koch HM, Ruther M, Weber T, Kafferlein HU, et al. Metabolites of the alkyl pyrrolidone solvents NMP and NEP in 24-h urine samples

of the German Environmental Specimen Bank from 1991 to 2014. *International Archives of Occupational and Environmental Health*. 2018;91(8):1073-82.

van der Voet H, de Boer WJ, Kruisselbrink JW, Goedhart PW, van der Heijden G, Kennedy MC, et al. The MCRA model for probabilistic single-compound and cumulative risk assessment of pesticides. *Food and Chemical Toxicology*. 2015;79:5-12.

Van Regenmortel T, Nys C, Janssen CR, Loft S, De Schamphelaere KAC. COMPARISON OF FOUR METHODS FOR BIOAVAILABILITY-BASED RISK ASSESSMENT OF MIXTURES OF CU, ZN, AND NI IN FRESHWATER. *Environmental Toxicology and Chemistry*. 2017;36(8):2123-38.

van Veen EM, Brentnall AR, Byers H, Harkness EF, Astley SM, Sampson S, et al. Use of Single-Nucleotide Polymorphisms and Mammographic Density Plus Classic Risk Factors for Breast Cancer Risk Prediction. *Jama Oncology*. 2018;4(4):476-82.

Vardei MH, Salmanmahiny A, Monavari SM, Zarkesh MMK. Cumulative effects of developed road network on woodland-a landscape approach. *Environmental Monitoring and Assessment*. 2014;186(11):7335-47.

Vilardo C, La Rovere EL. Multi-project environmental impact assessment: insights from offshore oil and gas development in Brazil. *Impact Assessment and Project Appraisal*. 2018;36(4):358-70.

Walker H, Spaling H, Sinclair AJ. Towards a home-grown approach to strategic environmental assessment: adapting practice and participation in Kenya. *Impact Assessment and Project Appraisal*. 2016;34(3):186-98.

Wallace KB. Mechanisms of pyrethroid neurotoxicity: implications for cumulative risk assessment. *Toxicology*. 2002;171(1):1-.

Wang B, Wang HX, Zhou W, Chen Y, Zhou Y, Jiang QW. Urinary Excretion of Phthalate Metabolites in School Children of China: Implication for Cumulative Risk Assessment of Phthalate Exposure. *Environmental Science & Technology*. 2015;49(2):1120-9.

Wang NCY, Rice GE, Teuschler LK, Colman J, Yang RSH. An In Silico Approach for Evaluating a Fraction-Based, Risk Assessment Method for Total Petroleum Hydrocarbon Mixtures. *Journal of Toxicology*. 2012.

Wang X, Pang Y, Zhou Q, Xie RR. Study of Water Environmental Cumulative Risk Assessment Based on Control Unit and Management Platform Application in Plain River Network. *Sustainability*. 2017;9(6).

Wason SC, Smith TJ, Perry MJ, Levy JI. Using Physiologically-Based Pharmacokinetic Models to Incorporate Chemical and Non-Chemical Stressors into Cumulative Risk Assessment: A Case Study of Pesticide Exposures. *International Journal of Environmental Research and Public Health*. 2012;9(5):1971-83.

Weber M, Krogman N, Antoniuk T. Cumulative Effects Assessment: Linking Social, Ecological, and Governance Dimensions. *Ecology and Society*. 2012;17(2).

Webster KL, Beall FD, Creed IF, Kreutzweiser DP. Impacts and prognosis of natural resource development on water and wetlands in Canada's boreal zone. *Environmental Reviews*. 2015;23(1):78-131.

Weclaw P, Hudson RJ. Simulation of conservation and management of woodland caribou. *Ecological Modelling*. 2004;177(1-2):75-94.

Wegner S, Heiger-Bernays W, Dix D. Spanning regulatory silos in the US EPA's Endocrine Disruptor Screening Program Letter to the Editor re: Evans et al. "Should the scope of human mixture risk assessment span legislative and regulatory silos for chemicals?". *Science of the Total Environment*. 2016;553:671-2.

Weinreich UM, Thomsen LP, Bielaska B, Jensen VH, Vuust M, Rees SE. The effect of comorbidities on COPD assessment: a pilot study. *International Journal of Chronic Obstructive Pulmonary Disease*. 2015;10:429-38.

Weinreich UM, Thomsen LP, Brock C, Karbing DS, Rees SE. Diffusion capacity of the lung for carbon monoxide - A potential marker of impaired gas exchange or of systemic deconditioning in chronic obstructive lung disease? *Chronic Respiratory Disease*. 2015;12(4):357-64.

Wen HJ, Chen CC, Wu MT, Chen ML, Sun CW, Wu WC, et al. Phthalate exposure and reproductive hormones and sex-hormone binding globulin before puberty - Phthalate contaminated-foodstuff episode in Taiwan. *Plos One*. 2017;12(4).

Westbrook CJ, Noble BF. Science requisites for cumulative effects assessment for wetlands. *Impact Assessment and Project Appraisal*. 2013;31(4):318-23.

Westerholm E, Boix J, Miettinen HM, Roos R, Antunes-Fernandes E, Westerink R, et al. ATHON NDL-PCB effect database-A tool to facilitate the cumulative risk assessment of NDL-PCBs. *Toxicology Letters*. 2009;189:S244-S.

Wilkinson CF, Christoph GR, Julien E, Kelley JM, Kronenberg J, McCarthy J, et al. Assessing the risks of exposures to multiple chemicals with a common mechanism of toxicity: how to cumulate? *Regulatory toxicology and pharmacology* : RTP. 2000;31(1):30-43.

Williams PRD, Dotson GS, Maier A. Cumulative Risk Assessment (CRA): Transforming the Way We Assess Health Risks. *Environmental Science & Technology*. 2012;46(20):10868-74.

Willsteed EA, Birchenough SNR, Gill AB, Jude S. Structuring cumulative effects assessments to support regional and local marine management and planning obligations. *Marine Policy*. 2018;98:23-32.

Willsteed E, Gill AB, Birchenough SNR, Jude S. Assessing the cumulative environmental effects of marine renewable energy developments: Establishing common ground. *Science of the Total Environment*. 2017;577:19-32.

Winqvist A, Kirrane E, Klein M, Strickland M, Darrow LA, Sarnat SE, et al. Joint Effects of Ambient Air Pollutants on Pediatric Asthma Emergency Department Visits in Atlanta, 1998-2004. *Epidemiology*. 2014;25(5):666-73.

Wittassek M, Koch HM, Angerer J, Bruning T. Assessing exposure to phthalates - The human biomonitoring approach. *Molecular Nutrition & Food Research*. 2011;55(1):7-31.

Wolansky MJ, Harrill JA. Neurobehavioral toxicology of pyrethroid insecticides in adult animals: A critical review. *Neurotoxicology and Teratology*. 2008;30(2):55-78.

Wolfe SA, Griffith B, Wolfe CAG. Response of reindeer and caribou to human activities. *Polar Research*. 2000;19(1):63-73.

Wormley DD, Ramesh A, Hood DB. Environmental contaminant-mixture effects on CNS development, plasticity, and behavior. *Toxicology and Applied Pharmacology*. 2004;197(1):49-65.

Wu W, Zhou F, Wang Y, Ning Y, Yang JY, Zhou YK. Phthalate levels and related factors in children aged 6-12 years. *Environmental Pollution*. 2017;220:990-6.

Wyatt KH, Griffin R, Guerry AD, Ruckelshaus M, Fogarty M, Arkema KK. Habitat risk assessment for regional ocean planning in the US Northeast and Mid-Atlantic. *Plos One*. 2017;12(12).

Xue XZ, Hong HS, Charles AT. Cumulative environmental impacts and integrated coastal management: the case of Xiamen, China. *Journal of Environmental Management*. 2004;71(3):271-83.

Yang GL, Li J, Wang YH, Chen C, Zhao HY, Shao K. Quantitative ecotoxicity analysis for pesticide mixtures using benchmark dose methodology. *Ecotoxicology and Environmental Safety*. 2018;159:94-101.

Yang K, Lam K. Cumulative impact assessment: problems and practice in China mainland and Hong Kong. *Huan jing ke xue= Huanjing kexue*. 2001;22(1):120-5.

Yap NT. Unconventional shale gas development: challenges for environmental policy and EA practice. *Impact Assessment and Project Appraisal*. 2016;34(2):97-109.

Yorita Christensen KL, White P. A methodological approach to assessing the health impact of environmental chemical mixtures: PCBs and hypertension in the National Health and Nutrition Examination Survey. *International journal of environmental research and public health*. 2011;8(11):4220-37.

Young GS, Fox MA, Trush M, Kanarek N, Glass TA, Curriero FC. Differential Exposure to Hazardous Air Pollution in the United States: A Multilevel Analysis of Urbanization and Neighborhood Socioeconomic Deprivation. *International Journal of Environmental Research and Public Health*. 2012;9(6):2204-25.

Zhang B, Zhang T, Duan YS, Zhao Z, Huang XF, Bai XY, et al. Human exposure to phthalate esters associated with e-waste dismantling: Exposure levels, sources, and risk assessment. *Environment International*. 2019;124:1-9.

Zhang L, Jiang DG, Sui HX, Wu PG, Liu AD, Yang DJ, et al. Dietary Exposure to Benzyl Butyl Phthalate in China. *Biomedical and Environmental Sciences*. 2016;29(5):365-73.

Zhang XF, Knaak JB, Tornero-Velez R, Blancato JN, Dary CC. Application of Physiologically Based Pharmacokinetic/Pharmacodynamic Modeling in Cumulative Risk Assessment for N-Methyl Carbamate Insecticides. Krieger R, editor 2010. 1591-605 p.

Zhang XM, Lou XY, Wu LH, Huang C, Chen D, Guo Y. Urinary phthalate metabolites and environmental phenols in university students in South China. *Environmental Research*. 2018;165:32-9.

Zhang XX, Wang MJ. Risk assessment of volcanic hazards of Changbaishan region based on RS and GIS. In: Pan XL, Gao W, Glantz MH, Honda Y, editors. Ecosystems Dynamics, Ecosystem-Society Interactions, and Remote Sensing Applications for Semi-Arid and Arid Land, Pts 1 and 2. Proceedings of the Society of Photo-Optical Instrumentation Engineers (Spie). 48902003. p. 988-98.

B. Combined Effects

Aarhus L, Tambs K, Nafstad P, Bjorgan E, Engdahl B. Childhood sensorineural hearing loss: effects of combined exposure with aging or noise exposure later in life. *European archives of oto-rhino-laryngology : official journal of the European Federation of Oto-Rhino-Laryngological Societies (EUFOS) : affiliated with the German Society for Oto-Rhino-Laryngology - Head and Neck Surgery*. 2016;273(5):1099-105.

Abarikwu SO, Duru QC, Chinonso OV, Njoku RC. Antioxidant enzymes activity, lipid peroxidation, oxidative damage in the testis and epididymis, and steroidogenesis in rats after co-exposure to atrazine and ethanol. *Andrologia*. 2016;48(5):548-57.

Abarikwu SO, Duru QC, Njoku R-CC, Amadi BA, Tamunoibuomie A, Keboh E. Effects of co-exposure to atrazine and ethanol on the oxidative damage of kidney and liver in Wistar rats. *Renal failure*. 2017;39(1):588-96.

Abd El Moneam NM, Shreadah MA, El-Assar SA, De Voogd NJ, Nabil-Adam A. Hepatoprotective effect of Red Sea sponge extract against the toxicity of a real-life mixture of persistent organic pollutants. *Biotechnology & Biotechnological Equipment*. 2018;32(3):734-43.

Abd-Elhakim YM, El Sharkawy NI, El Bohy KM, Gomaa M, Haseeb S. Morphological, biochemical, and histopathological postmortem ocular indices following subchronic exposure to cadmium and/or lead in a rabbit model. *Environmental Science and Pollution Research*. 2018;25(7):6619-32.

Abd-Elhakim YM, Mohammed AT, Ali HA. Impact of subchronic exposure to triclosan and/or fluoride on estrogenic activity in immature female rats: The expression pattern of calbindin-D9k and estrogen receptor genes. *Journal of Biochemical and Molecular Toxicology*. 2018;32(2).

Abdel-Rahman A, Abou-Donia S, El-Masry E, Shetty A, Abou-Donia M. Stress and combined exposure to low doses of pyridostigmine bromide, DEET, and permethrin produce neurochemical and neuropathological alterations in cerebral cortex, hippocampus, and cerebellum. *Journal of toxicology and environmental health Part A*. 2004;67(2):163-92.

Abdel-Wahhab MA, El-Nekeety AA, Hassan NS, Gibriel AAY, Abdel-Wahhab KG. Encapsulation of cinnamon essential oil in whey protein enhances the protective effect against single or combined sub-chronic toxicity of fumonisin B-1

and/or aflatoxin B-1 in rats. *Environmental Science and Pollution Research*. 2018;25(29):29144-61.

Abou-Donia MB, Dechkovskaia AM, Goldstein LB, Abdel-Rahman A, Bullman SL, Khan WA. Co-exposure to pyridostigmine bromide, DEET, and/or permethrin causes sensorimotor deficit and alterations in brain acetylcholinesterase activity. *Pharmacology, biochemistry, and behavior*. 2004;77(2):253-62.

Abou-Donia MB, Suliman HB, Khan WA, Abdel-Rahman AA. Testicular germ-cell apoptosis in stressed rats following combined exposure to pyridostigmine bromide, N,N-diethyl m-toluamide (DEET), and permethrin. *Journal of toxicology and environmental health Part A*. 2003;66(1):57-73.

Abreu-Villaca Y, Cavina CC, Ribeiro-Carvalho A, Correa-Santos M, Naiff VF, Filgueiras CC, et al. Combined exposure to tobacco smoke and ethanol during adolescence leads to short- and long-term modulation of anxiety-like behavior. *Drug and alcohol dependence*. 2013;133(1):52-60.

Abreu-Villaca Y, de Carvalho Graca AC, Ribeiro-Carvalho A, Naiff VdF, Manhaes AC, Filgueiras CC. Combined exposure to tobacco smoke and ethanol in adolescent mice elicits memory and learning deficits both during exposure and withdrawal. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*. 2013;15(7):1211-21.

Abreu-Villaca Y, Medeiros AH, Lima CS, Faria FP, Filgueiras CC, Manhaes AC. Combined exposure to nicotine and ethanol in adolescent mice differentially affects memory and learning during exposure and withdrawal. *Behavioural brain research*. 2007;181(1):136-46.

Abreu-Villaca Y, Nunes F, do E Queiroz-Gomes F, Manhaes AC, Filgueiras CC. Combined exposure to nicotine and ethanol in adolescent mice differentially affects anxiety levels during exposure, short-term, and long-term withdrawal. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*. 2008;33(3):599-610.

Abu-Qare AW, Abou-Donia MB. Combined exposure to DEET (N,N-diethyl-m-toluamide) and permethrin: pharmacokinetics and toxicological effects. *Journal of toxicology and environmental health Part B, Critical reviews*. 2003;6(1):41-53.

Abu-Qare AW, Abou-Donia MB. Combined exposure to DEET (N,N-diethyl-m-toluamide) and permethrin-induced release of rat brain mitochondrial

cytochrome c. *Journal of toxicology and environmental health Part A*. 2001;63(4):243-52.

Abu-Qare AW, Abou-Donia MB. Combined exposure to sarin and pyridostigmine bromide increased levels of rat urinary 3-nitrotyrosine and 8-hydroxy-2'-deoxyguanosine, biomarkers of oxidative stress. *Toxicology letters*. 2001;123(1):51-8.

Adam O, Badot P-M, Degiorgi F, Crini G. Mixture toxicity assessment of wood preservative pesticides in the freshwater amphipod *Gammarus pulex* (L.). *Ecotoxicology and environmental safety*. 2009;72(2):441-9.

Adam SE, Al-Yahya MA, Al-Farhan AH. Combined toxicity of *Cassia senna* and *Citrullus colocynthis* in rats. *Veterinary and human toxicology*. 2001;43(2):70-2.

Adams VH, McAtee MJ, Johnson MS. Implementation of the basic hazard index screening for health risks associated with simultaneous exposure to multiple chemicals using a standardized target organ and systems framework. *Integrated environmental assessment and management*. 2017;13(5):852-60.

Adedara IA, Abolaji AO, Awogbindin IO, Farombi EO. Suppression of the brain-pituitary-testicular axis function following acute arsenic and manganese co-exposure and withdrawal in rats. *Journal of trace elements in medicine and biology : organ of the Society for Minerals and Trace Elements (GMS)*. 2017;39:21-9.

Adedara IA, Owumi SE, Uwaifo AO, Farombi EO. Aflatoxin B₁ and ethanol co-exposure induces hepatic oxidative damage in mice. *Toxicology and industrial health*. 2010;26(10):717-24.

Affek K, Zaleska-Radziwill M, Doskocz N, Debek K. Mixture toxicity of pharmaceuticals present in wastewater to aquatic organisms. *Desalination and Water Treatment*. 2018;117:15-20.

Afolabi BA, Adedara IA, Souza DO, Rocha JBT. Dietary co-exposure to methylmercury and monosodium glutamate disrupts cellular and behavioral responses in the lobster cockroach, *Nauphoeta cinerea* model. *Environmental Toxicology and Pharmacology*. 2018;64:70-7.

Agadzhanian AN, Divakova SM. Central hemodynamics in the combined exposure of the body to hypoxia and physical loading against a background of a limited motor regimen. *Vestnik Akademii meditsinskikh nauk SSSR*. 1980(8):47-55.

Agadzhanyan NA, Bragin LK, Davydov GA, Spasskii Yu A. Dynamics of external respiration and gas exchange during combined exposure to hypoxia and hypercapnia. *Human physiology*. 1984;10(4):282-8.

Agmon P, Livanos AC, Katzir A, Yariv A. Simultaneous exposure and development of photoresist materials: an analytical model. *Applied optics*. 1977;16(10):2612-4.

Agrawal S, Bhatnagar P, Flora SJS. Changes in tissue oxidative stress, brain biogenic amines and acetylcholinesterase following co-exposure to lead, arsenic and mercury in rats. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2015;86:208-16.

Ahangarpour A, Alboghobeish S, Oroojan AA, Zeidooni L, Samimi A, Afshari G. Effects of Combined Exposure to Chronic High-Fat Diet and Arsenic on Thyroid Function and Lipid Profile in Male Mouse. *Biological Trace Element Research*. 2018;182(1):37-48.

Ahangarpour A, Alboghobeish S, Rezaei M, Khodayar MJ, Oroojan AA, Zainvand M. Evaluation of Diabetogenic Mechanism of High Fat Diet in Combination with Arsenic Exposure in Male Mice. *Iranian journal of pharmaceutical research : IJPR*. 2018;17(1):164-83.

Ahmadzadeh S, Dolatabadi M. Electrochemical treatment of pharmaceutical wastewater through electrosynthesis of iron hydroxides for practical removal of metronidazole. *Chemosphere*. 2018;212:533-9.

Ahn J, Kim NS, Lee BK, Park J, Kim Y. Association of Blood Pressure with Blood Lead and Cadmium Levels in Korean Adolescents Analysis of Data from the 2010-2016 Korean National Health and Nutrition Examination Survey. *Journal of Korean Medical Science*. 2018;33(44).

Ahonen SA, Hayden B, Leppanen JJ, Kahilainen KK. Climate and productivity affect total mercury concentration and bioaccumulation rate of fish along a spatial gradient of subarctic lakes. *Science of the Total Environment*. 2018;637:1586-96.

Aichinger G, Puntischer H, Beisl J, Kutt ML, Warth B, Marko D. Delphinidin protects colon carcinoma cells against the genotoxic effects of the mycotoxin alvertoxin II. *Toxicology Letters*. 2018;284:136-42.

Ait-Aissa S, Ausseil O, Palluel O, Vindimian E, Garnier-Laplace J, Porcher JM. Biomarker responses in juvenile rainbow trout (*Oncorhynchus mykiss*) after

single and combined exposure to low doses of cadmium, zinc, PCB77 and 17beta-oestradiol. Biomarkers : biochemical indicators of exposure, response, and susceptibility to chemicals. 2003;8(6):491-508.

Aitbaev TK. Changes in various indicators of lipid metabolism during isolated and combined exposure to hydrogen fluoride, sulfur dioxide and hydrogen sulfide in various concentrations. *Gigiena truda i professional'nye zabolevaniia*. 1984(6):16-9.

Aizenshtadt VS. Primary reactions to combined exposure to chemical substances. *Gigiena truda i professional'nye zabolevaniia*. 1979(10):35-7.

Akande MG, Aliu YO, Ambali SF, Ayo JO. Taurine mitigates cognitive impairment induced by chronic co-exposure of male Wistar rats to chlorpyrifos and lead acetate. *Environmental toxicology and pharmacology*. 2014;37(1):315-25.

Akhmetzhanova BT, Beskov VN, Bazeliuk LT. Pathomorphologic studies of lungs, liver and kidneys in experimental animals under combined exposure to coal rock dust and physical exertion. *Meditcina truda i promyshlennaia ekologiia*. 2005(4):42-5.

Akinola OB, Biliaminu SA, Adedeji OG, Oluwaseun BS, Olawoyin OM, Adelabu TA. Combined effects of chronic hyperglycaemia and oral aluminium intoxication on testicular tissue and some male reproductive parameters in Wistar rats. *Andrologia*. 2016;48(7):779-86.

Akinyemi JO, Adedini SA, Wandera SO, Odimegwu CO. Independent and combined effects of maternal smoking and solid fuel on infant and child mortality in sub-Saharan Africa. *Tropical medicine & international health : TM & IH*. 2016;21(12):1572-82.

Aksakal FI, Ciltas A. The impact of ultraviolet B (UV-B) radiation in combination with different temperatures in the early life stage of zebrafish (*Danio rerio*). *Photochemical & Photobiological Sciences*. 2018;17(1):35-41.

Al Amoodi A, Azar E. Impact of Human Actions on Building Energy Performance: A Case Study in the United Arab Emirates (UAE). *Sustainability*. 2018;10(5).

Alabi OA, Silva AH, Purnhagen LRP, Souza GRR, de Mello LJ, Filippin-Monteiro FB, et al. Genetic, reproductive and oxidative damage in mice triggered by co-exposure of nanoparticles: From a hypothetical scenario to a real concern. *Science of the Total Environment*. 2019;660:1264-73.

Alajlouni AM, Al-Malahmeh AJ, Wesseling S, Kalli M, Vervoort J, Rietjens IMCM. Risk assessment of combined exposure to alkenylbenzenes through consumption of plant food supplements containing parsley and dill. Food additives & contaminants Part A, Chemistry, analysis, control, exposure & risk assessment. 2017;34(12):2201-11.

Alassane-Kpembi I, Puel O, Pinton P, Cossalter A-M, Chou T-C, Oswald IP. Co-exposure to low doses of the food contaminants deoxynivalenol and nivalenol has a synergistic inflammatory effect on intestinal explants. Archives of toxicology. 2017;91(7):2677-87.

Alassane-Kpembi I, Schatzmayr G, Taranu I, Marin D, Puel O, Oswald IP. Mycotoxins co-contamination: Methodological aspects and biological relevance of combined toxicity studies. Critical reviews in food science and nutrition. 2017;57(16):3489-507.

Al-Hasawi NA, Amine SA, Novotny L. The In Vitro Anti-Proliferative Interaction of Flavonoid Quercetin and Toxic Metal Cadmium in the 1321N1 Human Astrocytoma Cell Line. Scientia Pharmaceutica. 2018;86(3).

Ali F, Sultana S. Repeated short-term stress synergizes the ROS signalling through up regulation of NFkB and iNOS expression induced due to combined exposure of trichloroethylene and UVB rays. Molecular and cellular biochemistry. 2012;360(1-2):133-45.

AlJabr AM, Hussain A, Rizwan-ul-haq M. Toxin-Pathogen Synergy Reshaping Detoxification and Antioxidant Defense Mechanism of *Oligonychus afrasiaticus* (McGregor). Molecules. 2018;23(8).

Allison AC, Lightbown JW. Inhibition of cellular respiration by co-carcinogenic fractions of croton oil. Nature. 1961;189:892-5.

Alloy M, Garner TR, Bridges K, Mansfield C, Carney M, Forth H, et al. Co-exposure to sunlight enhances the toxicity of naturally weathered Deepwater Horizon oil to early lifestage red drum (*Sciaenops ocellatus*) and speckled seatrout (*Cynoscion nebulosus*). Environmental toxicology and chemistry. 2017;36(3):780-5.

Almeida A, Calisto V, Esteves VI, Schneider RJ, Soares A, Figueira E, et al. Effects of single and combined exposure of pharmaceutical drugs (carbamazepine and cetirizine) and a metal (cadmium) on the biochemical responses of *R. philippinarum*. Aquatic Toxicology. 2018;198:10-9.

Almeida A, Calisto V, Esteves VI, Schneider RJ, Soares AMVM, Figueira E, et al. Effects of single and combined exposure of pharmaceutical drugs (carbamazepine and cetirizine) and a metal (cadmium) on the biochemical responses of *R. philippinarum*. *Aquatic toxicology* (Amsterdam, Netherlands). 2018;198:10-9.

Almeida A, Freitas R, Calisto V, Esteves VI, Schneider RJ, Soares A, et al. Effects of carbamazepine and cetirizine under an ocean acidification scenario on the biochemical and transcriptome responses of the clam *Ruditapes philippinarum*. *Environmental Pollution*. 2018;235:857-68.

Almeida AR, Jesus F, Henriques JF, Andrade TS, Barreto A, Koba O, et al. The role of humic acids on gemfibrozil toxicity to zebrafish embryos. *Chemosphere*. 2019;220:556-64.

Al-Omar MA, Abbas AK, Al-Obaidy SA. Combined effect of exposure to lead and chlordane on the testicular tissues of swiss mice. *Toxicology letters*. 2000;115(1):1-8.

Alpen EL, Sheline GE. The combined effects of thermal burns and whole body X irradiation on survival time and mortality. *Annals of surgery*. 1954;140(1):113-8.

Alsmadi MM, Idkaidek N. Optimization of Drugs Pharmacotherapy During Pregnancy Using Physiologically Based Pharmacokinetic Models - An Update. *Current Drug Metabolism*. 2018;19(12):972-8.

Altenburger R, Backhaus T, Boedeker W, Faust M, Scholze M. Simplifying complexity: Mixture toxicity assessment in the last 20 years. *Environmental toxicology and chemistry*. 2013;32(8):1685-7.

Altenburger R, Brack W, Burgess RM, Busch W, Escher BI, Focks A, et al. Future water quality monitoring: improving the balance between exposure and toxicity assessments of real-world pollutant mixtures. *Environmental Sciences Europe*. 2019;31.

Altenburger R, Nendza M, Schuurmann G. Mixture toxicity and its modeling by quantitative structure-activity relationships. *Environmental toxicology and chemistry*. 2003;22(8):1900-15.

Altenburger R, Scholz S, Schmitt-Jansen M, Busch W, Escher BI. Mixture toxicity revisited from a toxicogenomic perspective. *Environmental science & technology*. 2012;46(5):2508-22.

Altenburger R, Scholze M, Busch W, Escher BI, Jakobs G, Krauss M, et al. Mixture effects in samples of multiple contaminants - An inter-laboratory study with manifold bioassays. *Environment International*. 2018;114:95-106.

Altenburger R. Understanding combined effects for metal co-exposure in ecotoxicology. *Metal ions in life sciences*. 2011;8:1-26.

Alzoubi A, Ghazwi R, Alzoubi K, Alqudah M, Kheirallah K, Khabour O, et al. Vascular endothelial growth factor receptor inhibition enhances chronic obstructive pulmonary disease picture in mice exposed to waterpipe smoke. *Folia Morphologica*. 2018;77(3):447-55.

Amanmuradova N. Combined exposure to sinusoidal modulated currents and ultrasonic vibrations in the neurological manifestations of lumbar osteochondrosis. *Voprosy kurortologii, fizioterapii, i lechebnoi fizicheskoi kultury*. 1990(1):30-2.

Amid C, Olstedt M, Gunnarsson JS, Le Lan H, Minh HTT, Van den Brink PJ, et al. Additive effects of the herbicide glyphosate and elevated temperature on the branched coral *Acropora formosa* in Nha Trang, Vietnam. *Environmental Science and Pollution Research*. 2018;25(14):13360-72.

Amiri F, Ko EA, Javeshghani D, Reudelhuber TL, Schiffrin EL. Deleterious combined effects of salt-loading and endothelial cell restricted endothelin-1 overexpression on blood pressure and vascular function in mice. *Journal of hypertension*. 2010;28(6):1243-51.

Ammons MCB, Ward LS, Dowd S, James GA. Combined treatment of *Pseudomonas aeruginosa* biofilm with lactoferrin and xylitol inhibits the ability of bacteria to respond to damage resulting from lactoferrin iron chelation. *International journal of antimicrobial agents*. 2011;37(4):316-23.

Amosov IS, Malygina AI, Morozova TG, Kurpeshev OK. Microcirculation of tumors and adjacent tissues during combined exposure to metronidazole and hyperthermia. *Meditinskaiia radiologiia*. 1987;32(1):70-2.

An J, Yin L, Shang Y, Zhong Y, Zhang X, Wu M, et al. The combined effects of BDE47 and BaP on oxidatively generated DNA damage in L02 cells and the possible molecular mechanism. *Mutation research*. 2011;721(2):192-8.

An Y-J, Lee W-M. Comparative and combined toxicities of toluene and methyl tert-butyl ether to an Asian earthworm *Perionyx excavatus*. *Chemosphere*. 2008;71(3):407-11.

Anan'eva TV, Likholat EA, Dvoretiskii AI. The biological effects of combined exposure to low-dose irradiation and heavy metal ions. *Radiatsionnaia biologiiia, radioecologiiia*. 2000;40(4):410-5.

Andersen JK. Paraquat and iron exposure as possible synergistic environmental risk factors in Parkinson's disease. *Neurotoxicity research*. 2003;5(5):307-13.

Andersen ZJ, de Nazelle A, Mendez MA, Garcia-Aymerich J, Hertel O, Tjonneland A, et al. A study of the combined effects of physical activity and air pollution on mortality in elderly urban residents: the Danish Diet, Cancer, and Health Cohort. *Environmental health perspectives*. 2015;123(6):557-63.

Anderson CC, Aivazidis S, Kuzyk CL, Jain A, Roede JR. Acute Maneb Exposure Significantly Alters Both Glycolysis and Mitochondrial Function in Neuroblastoma Cells. *Toxicological Sciences*. 2018;165(1):61-73.

Anderson R, Eftychis HA. Potentiation of the generation of reactive oxidants by human phagocytes during exposure to benoxaprofen and ultraviolet radiation in vitro. *The British journal of dermatology*. 1986;115(3):285-95.

Anderson SM, Naidoo RN, Pillay Y, Tiloke C, Muttoo S, Asharam K, et al. HIV induced nitric oxide and lipid peroxidation, influences neonatal birthweight in a South African population. *Environment International*. 2018;121:1-12.

Andriianov IV, Smirnov VP. The enhanced lethality of cells in suspension during simultaneous exposure to pulsed electrical and shock-wave acoustic fields. *Izvestiia Akademii nauk Seriia biologicheskaiia*. 1999(4):390-5.

Andrzejak R, Antonowicz J, Lewczuk E, Tomczyk J, Smolik R. Effect of combined exposure (noise, dust, nitrogen oxides) on health status of metal workers in heavy industry. Evaluation of erythrocyte metabolism. *Medycyna pracy*. 1992;43(5):411-20.

Angerer J, Lehnert G. Occupational chronic exposure to organic solvents. VIII. Phenolic compounds--metabolites of alkylbenzenes in man. Simultaneous exposure to ethylbenzene and xylenes. *International archives of occupational and environmental health*. 1979;43(2):145-50.

Angrish MM, Allard P, McCullough SD, Druwe IL, Chadwick LH, Hines E, et al. Epigenetic Applications in Adverse Outcome Pathways and Environmental Risk Evaluation. *Environmental Health Perspectives*. 2018;126(4).

Anisimov IZ. Response of central neurons to combined exposure to the neuropeptides angiotensin II and bradykinin. *Fiziologicheskii zhurnal SSSR imeni I M Sechenova*. 1987;73(4):475-9.

Anjum NA, Srikanth K, Mohmood I, Sayeed I, Trindade T, Duarte AC, et al. Brain glutathione redox system significance for the control of silica-coated magnetite nanoparticles with or without mercury co-exposures mediated oxidative stress in European eel (*Anguilla anguilla* L.). *Environmental science and pollution research international*. 2014;21(12):7746-56.

Annaeva LR, Khvastunov RM. Principles of growth of unidirectional combined effects of harmful substances after increase in their quantity. *Gigiena i sanitarii*. 1989(7):10-3.

Anno GH, Bloom RM. Combined effects modeling of ionizing radiation and biological agent exposures. *Military medicine*. 2002;167(2 Suppl):107-9.

Antecka K, Zdarta J, Siwinska-Stefanska K, Sztuk G, Jankowska E, Oleskowicz-Popiel P, et al. Synergistic Degradation of Dye Wastewaters Using Binary or Ternary Oxide Systems with Immobilized Laccase. *Catalysts*. 2018;8(9).

Antoniou C, Fragkoudi I, Martinou A, Stavrinides MC, Fotopoulos V. Spatial response of *Medicago truncatula* plants to drought and spider mite attack. *Plant Physiology and Biochemistry*. 2018;130:658-62.

Antoniskis D, Easley AC, Espina BM, Davidson PT, Barnes PF. Combined toxicity of zidovudine and antituberculosis chemotherapy. *The American review of respiratory disease*. 1992;145(2 Pt 1):430-4.

Antov GP, Ivanovich EK. Changes of some enzyme activity in adrenal glands exposed to combined effect of vibration and lead in rats. *Gigiena i sanitarii*. 1993(4):55-7.

Anwer J, Mehrotra NK. Effect of simultaneous exposure to nickel chloride and benzo(a)pyrene on developing chick embryos. *Drug and chemical toxicology*. 1986;9(2):171-83.

Aquilino M, Martinez-Guitarte JL, Garcia P, Beltran EM, Fernandez C, Sanchez-Arguello P. Combining the assessment of apical endpoints and gene expression in the freshwater snail *Physa acuta* after exposure to reclaimed water. *Science of the Total Environment*. 2018;642:180-9.

Arain MB, Kazi TG, Baig JA, Afridi HI, Sarajuddin, Brehman KD, et al. Co-exposure of arsenic and cadmium through drinking water and tobacco

smoking: risk assessment on kidney dysfunction. *Environmental science and pollution research international*. 2015;22(1):350-7.

Arambourou H, Stoks R. Combined effects of larval exposure to a heat wave and chlorpyrifos in northern and southern populations of the damselfly *Ischnura elegans*. *Chemosphere*. 2015;128:148-54.

Ardestani MM, Oduber F, van Gestel CAM. A combined toxicokinetics and toxicodynamics approach to assess the effect of porewater composition on cadmium bioavailability to *Folsomia candida*. *Environmental toxicology and chemistry*. 2014;33(7):1570-7.

Arenas-Sanchez A, Lopez-Heras I, Nozal L, Vighi M, Rico A. Effects of increased temperature, drought, and an insecticide on freshwater zooplankton communities. *Environmental Toxicology and Chemistry*. 2019;38(2):396-411.

Arenas-Sanchez A, Rico A, Rivas-Tabares D, Blanco A, Garcia-Doncel P, Romero-Salas A, et al. Identification of contaminants of concern in the upper Tagus river basin (central Spain). Part 2: Spatio-temporal analysis and ecological risk assessment. *Science of the Total Environment*. 2019;667:222-33.

Armianov G, Khalkova Z. Experimental studies on changes in cerebral bioelectrical activity during combined exposure to benzene and tobacco smoke. *Problemi na khigienata*. 1988;13:114-8.

Arnan X, Arcoverde GB, Pie MR, Ribeiro-Neto JD, Leal IR. Increased anthropogenic disturbance and aridity reduce phylogenetic and functional diversity of ant communities in Caatinga dry forest. *Science of the Total Environment*. 2018;631-632:429-38.

Arrebola JP, Mutch E, Cuellar M, Quevedo M, Claire E, Mejia LM, et al. Factors influencing combined exposure to three indicator polychlorinated biphenyls in an adult cohort from Bolivia. *Environmental research*. 2012;116:17-25.

Arrhenius A, Backhaus T, Gronvall F, Junghans M, Scholze M, Blanck H. Effects of three antifouling agents on algal communities and algal reproduction: mixture toxicity studies with TBT, Irgarol, and Sea-Nine. *Archives of environmental contamination and toxicology*. 2006;50(3):335-45.

Arrhenius A, Gronvall F, Scholze M, Backhaus T, Blanck H. Predictability of the mixture toxicity of 12 similarly acting congeneric inhibitors of photosystem II in marine periphyton and epipsammon communities. *Aquatic toxicology* (Amsterdam, Netherlands). 2004;68(4):351-67.

Ashauer R, Boxall ABA, Brown CD. Modeling combined effects of pulsed exposure to carbaryl and chlorpyrifos on *Gammarus pulex*. *Environmental science & technology*. 2007;41(15):5535-41.

Ashauer R, Jager T. Physiological modes of action across species and toxicants: the key to predictive ecotoxicology. *Environmental Science-Processes & Impacts*. 2018;20(1):48-57.

Ashworth MJ, Chappell A, Ashmore E, Fowles J. Analysis and Assessment of Exposure to Selected Phthalates Found in Children's Toys in Christchurch, New Zealand. *International Journal of Environmental Research and Public Health*. 2018;15(2).

Asselman J, Meys J, Waegeman W, De Baets B, De Schamphelaere KAC. Combined exposure to cyanobacteria and carbaryl results in antagonistic effects on the reproduction of *Daphnia pulex*. *Environmental toxicology and chemistry*. 2013;32(9):2153-8.

Asweto CO, Hu HJ, Liang S, Wang LJ, Liu MD, Yang H, et al. Gene profiles to characterize the combined toxicity induced by low level co-exposure of silica nanoparticles and benzo a pyrene using whole genome microarrays in zebrafish embryos. *Ecotoxicology and Environmental Safety*. 2018;163:47-55.

Attarchi M, Dehghan F, Afrasyabi M, Sadeghi Z, Mohammadi S. Combined effect of cigarette smoking and occupational exposures on lung function: a cross-sectional study of rubber industry workers. *Workplace health & safety*. 2013;61(5):213-20.

Attarchi M, Golabadi M, Labbafinejad Y, Mohammadi S. Combined effects of exposure to occupational noise and mixed organic solvents on blood pressure in car manufacturing company workers. *American journal of industrial medicine*. 2013;56(2):243-51.

Atzori L, Flore C, Corrigan AM, Cherchi P, Casula D, Congiu L. Mechanisms of PCBs mixture toxicity on isolated rat hepatocytes. *Industrial health*. 1991;29(2):57-64.

Aubertin AM, Travo C, Fellingner E, Kirn A. DNA damage: a consequence of the combined effect of virus infection and incorporated radioactive thymidine. *Biochemical and biophysical research communications*. 1979;88(1):68-74.

Aune T, Espenes A, Aasen JAB, Quilliam MA, Hess P, Larsen S. Study of possible combined toxic effects of azaspiracid-1 and okadaic acid in mice via the

oral route. *Toxicol* : official journal of the International Society on Toxinology. 2012;60(5):895-906.

Aung HM, Huangteerakul C, Panvongsa W, Jensen AN, Chairoungdua A, Sukrong S, et al. Interrogation of ethnomedicinal plants for synthetic lethality effects in combination with deficiency in the DNA repair endonuclease RAD1 using a yeast cell-based assay. *Journal of ethnopharmacology*. 2018.

Aureli R, La-Marta J, Grossi AB, Della Pia EA, Esteve-Garcia E, Wulf-Andersen L, et al. A novel glucuronoxylan hydrolase produced by fermentation is safe as feed additive: toxicology and tolerance in broiler chickens. *Regulatory Toxicology and Pharmacology*. 2018;99:213-24.

Awad WA, Ghareeb K, Dadak A, Hess M, Bohm J. Single and combined effects of deoxynivalenol mycotoxin and a microbial feed additive on lymphocyte DNA damage and oxidative stress in broiler chickens. *PloS one*. 2014;9(1):e88028.

Axelsson O. Cancer and combined exposures to occupational and environmental factors. Recent results in cancer research *Fortschritte der Krebsforschung Progres dans les recherches sur le cancer*. 1991;122:60-70.

Axelstad M, Hass U, Scholze M, Christiansen S, Kortenkamp A, Boberg J. EDC IMPACT: Reduced sperm counts in rats exposed to human relevant mixtures of endocrine disrupters. *Endocrine Connections*. 2018;7(1):139-48.

AzariJafari H, Yahia A, Amor B. Assessing the individual and combined effects of uncertainty and variability sources in comparative LCA of pavements. *International Journal of Life Cycle Assessment*. 2018;23(9):1888-902.

Azevedo Costa CL, Chaves IS, Ventura-Lima J, Ferreira JLR, Ferraz L, de Carvalho LM, et al. In vitro evaluation of co-exposure of arsenium and an organic nanomaterial (fullerene, C₆₀) in zebrafish hepatocytes. *Comparative biochemistry and physiology Toxicology & pharmacology* : CBP. 2012;155(2):206-12.

Azevedo SL, Holz T, Rodrigues J, Monteiro T, Costa FM, Soares AMVM, et al. A mixture toxicity approach to predict the toxicity of Ag decorated ZnO nanomaterials. *The Science of the total environment*. 2017;579:337-44.

Azevedo SL, Ribeiro F, Jurkschat K, Soares AMVM, Loureiro S. Co-exposure of ZnO nanoparticles and UV radiation to *Daphnia magna* and *Danio rerio*: Combined effects rather than protection. *Environmental toxicology and chemistry*. 2016;35(2):458-67.

Azuma K, Ikeda K, Kagi N, Yanagi U, Osawa H. Physicochemical risk factors for building-related symptoms in air-conditioned office buildings: Ambient particles and combined exposure to indoor air pollutants. *Science of the Total Environment*. 2018;616:1649-55.

Azuma K, Ikeda K, Kagi N, Yanagi U, Osawa H. Physicochemical risk factors for building-related symptoms in air-conditioned office buildings: Ambient particles and combined exposure to indoor air pollutants. *The Science of the total environment*. 2018;616-617:1649-55.

Baarson KA, Snyder CA. Evidence for the disruption of the bone marrow microenvironment by combined exposures to inhaled benzene and ingested ethanol. *Archives of toxicology*. 1991;65(5):414-20.

Baas J, Augustine S, Marques GM, Dorne JL. Dynamic energy budget models in ecological risk assessment: From principles to applications. *Science of the Total Environment*. 2018;628-629:249-60.

Babenko AP, Cherniakov GM. The characteristics of the reactions of excitable tissue to combined exposure to microwaves and low-intensity ultrasound. *Gigiena truda i professional'nye zabolevaniia*. 1992(5):19-21.

Backhaus T, Porsbring T, Arrhenius A, Brosche S, Johansson P, Blanck H. Single-substance and mixture toxicity of five pharmaceuticals and personal care products to marine periphyton communities. *Environmental toxicology and chemistry*. 2011;30(9):2030-40.

Bacsi I, Deli J, Gonda S, Meszaros I, Vereb G, Dobronoki D, et al. Non-steroidal anti-inflammatory drugs initiate morphological changes but inhibit carotenoid accumulation in *Haematococcus pluvialis*. *Algal Research-Biomass Biofuels and Bioproducts*. 2018;31:1-13.

Baek IH, Kim Y, Baik S, Kim J. Investigation of the Synergistic Toxicity of Binary Mixtures of Pesticides and Pharmaceuticals on *Aliivibrio fischeri* in Major River Basins in South Korea. *International Journal of Environmental Research and Public Health*. 2019;16(2).

Baev VI, Volkova ZA, Maksimov NA. Role of tissue glycolysis in combined exposure to hypercapnia, hypoxia and hypothermia. *Fiziologicheskii zhurnal SSSR imeni I M Sechenova*. 1978;64(6):858-63.

Bag A, Chattopadhyay R. Evaluation of antioxidant potential of essential oils of some commonly used Indian spices in in vitro models and in food

supplements enriched with omega-6 and omega-3 fatty acids. *Environmental Science and Pollution Research*. 2018;25(1):388-98.

Bagheri F, Pourbakht A, Raisi A, Kamali M, Faridan M. The Effect of Hydrogen Inhalation on Temporary Threshold Shift Following Simultaneous Exposure to Noise and Carbon Monoxide in Guinea Pigs. *Health Scope*. 2018;7(4).

Bairakova A, Baev I, Kalina I. Chromosomal translocations evoked in the sex cells of male mice by combined exposure to chronic gamma and acute x-ray irradiation. *Kosmicheskaia biologii i aviakosmicheskaia meditsina*. 1978;12(6):72-3.

Bajard M, Etienne D, Quinsac S, Dambrine E, Sabatier P, Frossard V, et al. Legacy of early anthropogenic effects on recent lake eutrophication (Lake Benit, northern French Alps). *Anthropocene*. 2018;24:72-87.

Bakker M, Costa A, Silva TA, Stutenbecker L, Girardclos S, Loizeau JL, et al. Combined Flow Abstraction and Climate Change Impacts on an Aggrading Alpine River. *Water Resources Research*. 2018;54(1):223-42.

Balbi T, Smerilli A, Fabbri R, Ciacci C, Montagna M, Grasselli E, et al. Co-exposure to n-TiO₂ and Cd²⁺ results in interactive effects on biomarker responses but not in increased toxicity in the marine bivalve *M. galloprovincialis*. *The Science of the total environment*. 2014;493:355-64.

Balci C, Uzun O, Arici M, Hayran SA, Yuce D, Unal S. Nephrotoxicity of piperacillin-tazobactam combined with vancomycin: Should it be a concern? *International journal of antimicrobial agents*. 2018.

Baldera A, Hanson DA, Kraft B. Selecting indicators to monitor outcomes across projects and multiple restoration programs in the Gulf of Mexico. *Ecological Indicators*. 2018;89:559-71.

Balinang JM, Masvekar RR, Hauser KF, Knapp PE. Productive infection of human neural progenitor cells by R5 tropic HIV-1: opiate co-exposure heightens infectivity and functional vulnerability. *AIDS (London, England)*. 2017;31(6):753-64.

Balistrieri LS, Mebane CA, Cox SE, Puglis HJ, Calfee RD, Wang N. Potential Toxicity of Dissolved Metal Mixtures (Cd, Cu, Pb, Zn) to Early Life Stage White Sturgeon (*Acipenser transmontanus*) in the Upper Columbia River, Washington, United States. *Environmental Science & Technology*. 2018;52(17):9793-800.

Balistrieri LS, Mebane CA, Schmidt TS, Keller WB. Expanding metal mixture toxicity models to natural stream and lake invertebrate communities. *Environmental toxicology and chemistry*. 2015;34(4):761-76.

Balkow S, Loser K, Krummen M, Higuchi T, Rothoef T, Apelt J, et al. Dendritic cell activation by combined exposure to anti-CD40 plus interleukin (IL)-12 and IL-18 efficiently stimulates anti-tumor immunity. *Experimental dermatology*. 2009;18(1):78-87.

Ball JK, Field WE, Roe FJ, Walters M. THE CARCINOGENIC AND CO-CARCINOGENIC EFFECTS OF PARAFFIN WAX PELLETS AND GLASS BEADS IN THE MOUSE BLADDER. *British journal of urology*. 1964;36:225-37.

Ballou JE, George LA, 2nd, Thompson RC. The combined toxic effects of plutonium plus x-ray in rats. *Health physics*. 1962;8:581-7.

Baloch IB, Baloch MK. Irritant and co-carcinogenic diterpene esters from the latex of *Euphorbia cauducifolia* L. *Journal of Asian natural products research*. 2010;12(7):600-13.

Bambino K, Zhang C, Austin C, Amarasiriwardena C, Arora M, Chu J, et al. Inorganic arsenic causes fatty liver and interacts with ethanol to cause alcoholic liver disease in zebrafish. *Disease Models & Mechanisms*. 2018;11(2).

Banaee M, Tahery S, Haghi BN, Shahafve S, Vaziriyani M. Blood biochemical changes in common carp (*Cyprinus carpio*) upon co-exposure to titanium dioxide nanoparticles and paraquat. *Iranian Journal of Fisheries Sciences*. 2019;18(2):242-55.

Bandelet O, Camacho L, Ferguson M, Reimschuessel R, Stine C, Black T, et al. Performance of urinary and gene expression biomarkers in detecting the nephrotoxic effects of melamine and cyanuric acid following diverse scenarios of co-exposure. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2013;51:106-13.

Bandow N, Gartiser S, Ilvonen O, Schoknecht U. Evaluation of the impact of construction products on the environment by leaching of possibly hazardous substances. *Environmental Sciences Europe*. 2018;30.

Bang JH, Lee EJ. Differences in crab burrowing and halophyte growth by habitat types in a Korean salt marsh. *Ecological Indicators*. 2019;98:599-607.

Banni M, Bouraoui Z, Clerandeanu C, Narbonne JF, Boussetta H. Mixture toxicity assessment of cadmium and benzo a pyrene in the sea worm *Hediste diversicolor*. *Chemosphere*. 2009;77(7):902-6.

Banni M, Jebali J, Guerbej H, Dondero F, Boussetta H, Viarengo A. Mixture toxicity assessment of nickel and chlorpyrifos in the sea bass *Dicentrarchus labrax*. *Archives of environmental contamination and toxicology*. 2011;60(1):124-31.

Bao L, Shi H. Potential molecular mechanisms for combined toxicity of arsenic and alcohol. *Journal of inorganic biochemistry*. 2010;104(12):1229-33.

Bao YY, Ma CX, Hu L, Xing BS. Effect of individual and combined exposure of Fe₂O₃ nanoparticles and oxytetracycline on their bioaccumulation by rice (*Oryza sativa* L.). *Journal of Soils and Sediments*. 2019;19(5):2459-71.

Barantseva MI, Ivanova SM, Pakhomova AA, Nikitin EI, Vorozhtsova SV. Cytogenetic and biochemical assay of an unidirectional effect of chronic combined exposure of laboratory animals to isoeffective concentrations of chemical substances. *Aviakosmicheskaja i ekologicheskaja meditsina = Aerospace and environmental medicine*. 2006;40(3):50-4.

Barantseva MI, Mukhamedieva LN, Fedorenko BS, Ivanova SM, Pakhomova AA, Vorozhtsova SV. Cytogenetic and biochemical reactions of experimental animals to combined exposure to low-intensity radiation and chemical factors. *Aviakosmicheskaja i ekologicheskaja meditsina = Aerospace and environmental medicine*. 2007;41(2):54-60.

Barantseva MI, Mukhamedieva LN, Fedorenko BS, Vorozhtsova SV. Chromosomal aberrations upon isolated and combined exposures to chemical substances and ionizing irradiation. *Gigiena i sanitariia*. 2009(1):67-70.

Barata C, Calbet A, Saiz E, Ortiz L, Bayona JM. Predicting single and mixture toxicity of petrogenic polycyclic aromatic hydrocarbons to the copepod *Oithona davisae*. *Environmental toxicology and chemistry*. 2005;24(11):2992-9.

Barboza LGA, Vieira LR, Guilhermino L. Single and combined effects of microplastics and mercury on juveniles of the European seabass (&ITD*Dicentrarchus labrax*&IT): Changes in behavioural responses and reduction of swimming velocity and resistance time. *Environmental Pollution*. 2018;236:1014-9.

Barkhatova TP. Combined toxicosis in pregnant women (nephropathy against a background of pyelonephritis). *Fel'dsher i akusherka*. 1986;51(8):50-4.

Barkhatova TP. Combined toxicosis, placental insufficiency and fetal hypotrophy. *Fel'dsher i akusherka*. 1989;54(7):49-53.

Barmantlo SH, Parmentier EM, de Snoo GR, Vijver MG. Thiacloprid-induced toxicity influenced by nutrients: Evidence from in situ bioassays in

experimental ditches. *Environmental Toxicology and Chemistry*. 2018;37(7):1907-15.

Barreto A, Luis LG, Pinto E, Almeida A, Paiga P, Santos L, et al. Effects and bioaccumulation of gold nanoparticles in the gilthead seabream (*Sparus aurata*) - Single and combined exposures with gemfibrozil. *Chemosphere*. 2019;215:248-60.

Barreto A, Luis LG, Pinto E, Almeida A, Paiga P, Santos L, et al. Genotoxicity of gold nanoparticles in the gilthead seabream (*Sparus aurata*) after single exposure and combined with the pharmaceutical gemfibrozil. *Chemosphere*. 2019;220:11-9.

Bartrem C, Tirima S, von Lindern I, von Braun M, Worrell MC, Mohammad Anka S, et al. Unknown risk: co-exposure to lead and other heavy metals among children living in small-scale mining communities in Zamfara State, Nigeria. *International journal of environmental health research*. 2014;24(4):304-19.

Basallote MD, Rodriguez-Romero A, De Orte MR, DelValls TA, Riba I. CO₂ leakage simulation: effects of the pH decrease on fertilisation and larval development of *Paracentrotus lividus* and sediment metals toxicity. *Chemistry and Ecology*. 2018;34(1):1-21.

Basch PF, Joe LK. Infection of single snails with two different trematodes. I. Simultaneous exposure and early development of a schistosome and an echinostome. *Zeitschrift fur Parasitenkunde (Berlin, Germany)*. 1966;27(3):252-9.

Bastias-Candia S, Di Benedetto M, D'Addario C, Candeletti S, Romualdi P. Combined exposure to agriculture pesticides, paraquat and maneb, induces alterations in the N/OFQ-NOPr and PDYN/KOPr systems in rats: Relevance to sporadic Parkinson's disease. *Environmental toxicology*. 2015;30(6):656-63.

Battistoni M, Mercuri S, Ficetola GF, Metruccio FC, Menegola E, Pennati R. The Ascidian Embryo Teratogenicity assay in *Ciona intestinalis* as a new teratological screening to test the mixture effect of the co-exposure to ethanol and fluconazole. *Environmental Toxicology and Pharmacology*. 2018;57:76-85.

Battistoni M, Mercurio S, Ficetola GF, Metruccio FC, Menegola E, Pennati R. The Ascidian Embryo Teratogenicity assay in *Ciona intestinalis* as a new teratological screening to test the mixture effect of the co-exposure to ethanol and fluconazole. *Environmental toxicology and pharmacology*. 2018;57:76-85.

Bauer AK, Velmurugan K, Plottner S, Siegrist KJ, Romo D, Welge P, et al. Environmentally prevalent polycyclic aromatic hydrocarbons can elicit co-

carcinogenic properties in an in vitro murine lung epithelial cell model. *Archives of toxicology*. 2018;92(3):1311-22.

Baughman P, Marott JL, Lange P, Martin CJ, Shankar A, Petsonk EL, et al. Combined effect of lung function level and decline increases morbidity and mortality risks. *European journal of epidemiology*. 2012;27(12):933-43.

Baum JW, Kuehner AV, Benz RD, Carsten AL. A system for simultaneous exposure of small animals to 60-Hz electric and magnetic fields. *Bioelectromagnetics*. 1991;12(2):85-99.

Bechaux C, Zetlaoui M, Tressou J, Leblanc J-C, Heraud F, Crepet A. Identification of pesticide mixtures and connection between combined exposure and diet. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2013;59:191-8.

Bechmann RK, Lyng E, Westerlund S, Bomber S, Berry M, Amberg M, et al. Early life stages of Northern shrimp (*Pandalus borealis*) are sensitive to fish feed containing the anti-parasitic drug diflubenzuron. *Aquatic Toxicology*. 2018;198:82-91.

Beier EE, Inzana JA, Sheu T-J, Shu L, Puzas JE, Mooney RA. Effects of Combined Exposure to Lead and High-Fat Diet on Bone Quality in Juvenile Male Mice. *Environmental health perspectives*. 2015;123(10):935-43.

Bejenaru O, Lazarescu C, Vornicu S, David V. Specific Absorption Rate Evaluation in Case of Exposure of the Human Body to Radiofrequency Electromagnetic Field Generated by Mobile Communications. In: Gavrilas M, Fosalau C, Haba CG, Neagu BC, editors. 2018 International Conference and Exposition on Electrical and Power Engineering. International Conference and Exposition on Electrical and Power Engineering 2018. p. 1004-9.

Belden JB, Brain RA. Incorporating the joint toxicity of co-applied pesticides into the ecological risk assessment process. *Integrated Environmental Assessment and Management*. 2018;14(1):79-91.

Belden JB, Lydy MJ. Joint toxicity of chlorpyrifos and esfenvalerate to fathead minnows and midge larvae. *Environmental toxicology and chemistry*. 2006;25(2):623-9.

Bellas J. Prediction and assessment of mixture toxicity of compounds in antifouling paints using the sea-urchin embryo-larval bioassay. *Aquatic toxicology* (Amsterdam, Netherlands). 2008;88(4):308-15.

Bellelli G, Mazzola P, Corsi M, Zambon A, Corrao G, Castoldi G, et al. The combined effect of ADL impairment and delay in time from fracture to surgery on 12-month mortality: an observational study in orthogeriatric patients. *Journal of the American Medical Directors Association*. 2012;13(7):664.e9-.e14.

Bellingeri A, Bergami E, Grassi G, Faleri C, Redondo-Hasselerharm P, Koelmans AA, et al. Combined effects of nanoplastics and copper on the freshwater alga *Raphidocelis subcapitata*. *Aquatic Toxicology*. 2019;210:179-87.

Belokrinskii VS, Grin AN. Morpho-functional changes in the kidneys after combined exposure to UHF-field and hypoxia. *Vrachebnoe delo*. 1983(1):112-5.

Belyaev IA, Genin LG, Listratov YI, Melnikov IA, Razuvanov NG, Sviridov VG, et al. FEATURES OF MHD HEAT TRANSFER IN SIMPLE CHANNELS. *Magnetohydrodynamics*. 2018;54(3):245-59.

Benedetto A, Bocca C, Brizio P, Cannito S, Abete MC, Squadrone S. Effects of the rare elements lanthanum and cerium on the growth of colorectal and hepatic cancer cell lines. *Toxicology in Vitro*. 2018;46:9-18.

Ben-Horin S, Ungar B, Kopylov U, Lahat A, Yavzori M, Fudim E, et al. SAFETY, EFFICACY AND PHARMACOKINETICS OF VEDOLIZUMAB IN PATIENTS WITH SIMULTANEOUS EXPOSURE TO AN ANTI-TNF. *Gastroenterology*. 2018;154(6):S839-S40.

Ben-Horin S, Ungar B, Kopylov U, Lahat A, Yavzori M, Fudim E, et al. Safety, efficacy and pharmacokinetics of vedolizumab in patients with simultaneous exposure to an anti-tumour necrosis factor. *Alimentary Pharmacology & Therapeutics*. 2018;47(8):1117-25.

Ben-Horin S, Ungar B, Kopylov U, Lahat A, Yavzori M, Fudim E, et al. Safety, efficacy, and pharmacokinetics of vedolizumab in patients with simultaneous exposure to an anti-TNF. *Journal of Crohns & Colitis*. 2018;12:S493-S.

Berenguer P, Soulage C, Fautrel A, Pequignot J-M, Abraini JH. Behavioral and neurochemical effects induced by subchronic combined exposure to toluene at 40 ppm and noise at 80 dB-A in rats. *Physiology & behavior*. 2004;81(3):527-34.

Beritic-Stahuljak D, Valic F, Cigula M, Butkovic D. Simultaneous exposure to airborne flour particles and thermal load as cause of respiratory impairment. *International archives of occupational and environmental health*. 1976;37(3):193-203.

Berry G, Newhouse ML, Antonis P. Combined effect of asbestos and smoking on mortality from lung cancer and mesothelioma in factory workers. *British journal of industrial medicine*. 1985;42(1):12-8.

Berry G, Newhouse ML, Turok M. Combined effect of asbestos exposure and smoking on mortality from lung cancer in factory workers. *Lancet (London, England)*. 1972;2(7775):476-8.

Bertash VI, Baev VI, Zozuliakova SV. Rat epiphysis in combined exposure to hypoxia, hypercapnia and cooling. *Fiziologicheskii zhurnal*. 1979;25(3):251-4.

Bertash VI, Baev VI. Rat thymus gland under combined exposure to hypoxia, hypercapnia and cooling. *Fiziologicheskii zhurnal*. 1978;24(1):29-33.

Bertucci A, Pierron F, Gourves PY, Klopp C, Lagarde G, Pereto C, et al. Whole-transcriptome response to wastewater treatment plant and stormwater effluents in the Asian clam, *Corbicula fluminea*. *Ecotoxicology and Environmental Safety*. 2018;165:96-106.

Bertuzzi S, Pellegrini E, Carniel FC, Incerti G, Lorenzini G, Nali C, et al. Ozone and desiccation tolerance in chlorolichens are intimately connected: a case study based on two species with different ecology. *Environmental Science and Pollution Research*. 2018;25(9):8089-103.

Beyaert R, Schulze-Osthoff K, Van Roy F, Fiers W. Synergistic induction of interleukin-6 by tumor necrosis factor and lithium chloride in mice: possible role in the triggering and exacerbation of psoriasis by lithium treatment. *European journal of immunology*. 1992;22(8):2181-4.

Bezyk Y, Dorodnikov M, Grzelka A, Nych A. Characteristics of temporal variability of urban ecosystem-atmosphere CO₂, CH₄, and N₂O fluxes. In: Kazmierczak B, Kutylowska M, Piekarska K, Jadwiszczak P, editors. 10th Conference on Interdisciplinary Problems in Environmental Protection and Engineering Eko-Dok 2018. E3S Web of Conferences. 442018.

Bhardwaj N, Pandey SK, Mehta J, Bhardwaj SK, Kim KH, Deep A. Bioactive nano-metal-organic frameworks as antimicrobials against Gram-positive and Gram-negative bacteria. *Toxicology Research*. 2018;7(5):931-41.

Bhari N, Sahni K, Dev T, Sharma VK. Symmetrical drug-related intertriginous and flexural erythema (Baboon syndrome) induced by simultaneous exposure to oral and topical terbinafine. *International journal of dermatology*. 2017;56(8):e168-e70.

Bhaskar Y, Lim LW, Mitra R. Enriched Environment Facilitates Anxiolytic Efficacy Driven by Deep-Brain Stimulation of Medial Prefrontal Cortex. *Frontiers in Behavioral Neuroscience*. 2018;12.

Bhattacharyya S, Feferman L, Tobacman JK. Distinct Effects of Carrageenan and High-Fat Consumption on the Mechanisms of Insulin Resistance in Nonobese and Obese Models of Type 2 Diabetes. *Journal of Diabetes Research*. 2019.

Bhattacharyya S, Feferman L, Unterman T, Tobacman JK. Exposure to common food additive carrageenan alone leads to fasting hyperglycemia and in combination with high fat diet exacerbates glucose intolerance and hyperlipidemia without effect on weight. *Journal of diabetes research*. 2015;2015:513429.

Bialk-Bielinska A, Caban M, Pieczynska A, Stepnowski P, Stolte S. Mixture toxicity of six sulfonamides and their two transformation products to green algae *Scenedesmus vacuolatus* and duckweed *Lemna minor*. *Chemosphere*. 2017;173:542-50.

Bialk-Bielinska A, Matzke M, Caban M, Stolte S, Kumirska J, Stepnowski P. Effects of five sulphonamides on duckweed (*Lemna minor*) after prolonged exposure time and their dependency on photoradiation. *Science of the Total Environment*. 2018;618:952-60.

Bianca W, Naf F. Responses of cattle to the combined exposure, to diurnal temperature rhythm (--5 to 25 degrees C) and to simulated high-altitude (4,000 m). *International journal of biometeorology*. 1979;23(4):299-310.

Bird MG, Wetmore BA, Letinski DJ, Nicolich M, Chen M, Schnatter AR, et al. Influence of toluene co-exposure on the metabolism and genotoxicity of benzene in mice using continuous and intermittent exposures. *Chemico-biological interactions*. 2010;184(1-2):233-9.

Birkebak J, Buckley L, Dambach D, Musvasva E, Price K, Ralston S, et al. Combination Toxicology Studies: Industry Perspective From IQ Consortium DruSafe Survey. *International Journal of Toxicology*. 2018;37(1):92-.

Birkebak J, Buckley LA, Dambach D, Musyasva E, Price K, Ralston S, et al. Pharmaceutical industry perspective on combination toxicity studies: Results from an intra-industry survey conducted by IQ DruSafe Leadership Group. *Regulatory Toxicology and Pharmacology*. 2019;102:40-6.

Bjerregaard-Olesen C, Bach CC, Long MH, Wielsoe M, Bech BH, Henriksen TB, et al. Associations of Fetal Growth Outcomes with Measures of the

Combined Xenoestrogenic Activity of Maternal Serum Perfluorinated Alkyl Acids in Danish Pregnant Women. *Environmental Health Perspectives*. 2019;127(1).

Black P, Niu L, Sachdeva M, Lean D, Poon R, Bowers WJ, et al. Modulation of the effects of methylmercury on rat neurodevelopment by co-exposure with Labrador Tea (*Rhododendron tomentosum* ssp. *subarcticum*). *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2011;49(9):2336-42.

Blaise JH, Park JE, Bellas NJ, Gitchell TM, Phan V. Caffeine consumption disrupts hippocampal long-term potentiation in freely behaving rats. *Physiological reports*. 2018;6(5).

Blossom SJ, Fernandes L, Bai S, Khare S, Gokulan K, Yuan Y, et al. Opposing actions of developmental trichloroethylene and high-fat-diet co-exposure on markers of lipogenesis and inflammation in autoimmune-prone mice. *Toxicological sciences : an official journal of the Society of Toxicology*. 2018.

Boardman L, Mitchell KA, Terblanche JS, Sorensen JG. A transcriptomics assessment of oxygen-temperature interactions reveals novel candidate genes underlying variation in thermal tolerance and survival. *Journal of Insect Physiology*. 2018;106:179-88.

Bobb JF, Dominici F, Peng RD. Reduced hierarchical models with application to estimating health effects of simultaneous exposure to multiple pollutants. *Journal of the Royal Statistical Society Series C, Applied statistics*. 2013;62(3).

Bobrov LL, Ponomarenko GN, Bulychev AB, Vinokurov IV, Kozyrev PV, Rastrosa VK. The combined exposure to physical factors at the sanatorium-health resort stage of patient rehabilitation in ischemic heart disease. *Voprosy kurortologii, fizioterapii, i lechebnoi fizicheskoi kultury*. 1996(1):6-9.

Bocker R, Estler CJ, Feiner C, Hopf G, Schrader K, Schramm W. Combined toxic effects of tetracycline and ethinyl estradiol on liver function of mice. *Research in experimental medicine Zeitschrift fur die gesamte experimentelle Medizin einschliesslich experimenteller Chirurgie*. 1985;185(2):151-62.

Bohn T. Criticism of EFSA's scientific opinion on combinatorial effects of 'stacked' GM plants. *Food and Chemical Toxicology*. 2018;111:268-74.

Bojarski B, Lutnicka H, Swadzba-Karbowy M, Makulska J, Jakubiak M, Pawlak K, et al. Effects of Herbicides Pendimethalin and Ethofumesate on

Common Carp (*Cyprinus carpio*) Erythrocyte Morphology. *Folia Biologica-Krakow*. 2018;66(3):143-9.

Bol'shakova TD, Voitenko AM, Neizhmakova NA, Shafran LM. Effect of combined exposure to noise, vibration, and high temperatures on sympathico-adrenal system in sailors. *Gigiena truda i professional'nye zabolevaniia*. 1982(9):44-6.

Bondarenko SL, Savchuk DA. Response of conifers to UV-B and climate in mountain areas. *Global Journal of Environmental Science and Management-Gjesm*. 2018;4(3):299-314.

Bonnet J, Neukomm S. Carcinogenic and co-carcinogenic substances in tobacco smoke. *Acta - Unio Internationalis Contra Cancrum*. 1959;15:561-3.

Bopp SK, Barouki R, Brack W, Dalla Costa S, Dorne J, Drakvik PE, et al. Current EU research activities on combined exposure to multiple chemicals. *Environment International*. 2018;120:544-62.

Bopp SK, Kienzler A, Richarz AN, van der Linden SC, Paini A, Parissis N, et al. Regulatory assessment and risk management of chemical mixtures: challenges and ways forward. *Critical Reviews in Toxicology*. 1-16.

Borek C, Ong A, Zaider M. Ozone activates transforming genes in vitro and acts as a synergistic co-carcinogen with gamma-rays only if delivered after radiation. *Carcinogenesis*. 1989;10(8):1549-51.

Borgert CJ, Quill TF, McCarty LS, Mason AM. Can mode of action predict mixture toxicity for risk assessment? *Toxicology and applied pharmacology*. 2004;201(2):85-96.

Borodin YI, Michurina SV, Arkhipov SA, Belkin AD, Jurakovsky IP. Expression of intracellular molecular apoptosis regulator Bcl-2 in the liver in isolated and combined exposure to 24-h illumination and industrial frequency magnetic field. *Bulletin of experimental biology and medicine*. 2008;145(4):511-3.

Borodovitsyna O, Flamini MD, Chandler DJ. Acute Stress Persistently Alters Locus Coeruleus Function and Anxiety-like Behavior in Adolescent Rats. *Neuroscience*. 2018;373:7-19.

Borska L, Fiala Z, Smejkalova J, Hamakova K, Kremlacek J. Possible genotoxic risk of combined exposure to pharmaceutical coal tar and UV-B radiation. *Central European journal of public health*. 2004;12 Suppl:S14-5.

Bose R, Dangerfield A, Rupich SM, Guo TL, Zheng YZ, Kwon S, et al. Engineering Multilayered Nanocrystal Solids with Enhanced Optical Properties

Using Metal Oxides for Photonic Applications. *Acs Applied Nano Materials*. 2018;1(12):6782-9.

Bourret J, Viallier J, Tolot F, Robillard J. Polyneuritis by simultaneous exposure to trichloroethylene and gasoline. *Revue medicale de la Suisse romande*. 1968;88(3):173-81.

Bouslimi A, Ouannes Z, Golli EE, Bouaziz C, Hassen W, Bacha H. Cytotoxicity and oxidative damage in kidney cells exposed to the mycotoxins ochratoxin a and citrinin: individual and combined effects. *Toxicology mechanisms and methods*. 2008;18(4):341-9.

Bovenzi M, Mauro M, Ronchese F, Larese Filon F. Neck and upper limb disorders caused by combined exposures to ergonomic risk factors and hand-transmitted vibration. *Giornale italiano di medicina del lavoro ed ergonomia*. 2008;30(3 Suppl):39-45.

Bovenzi M, Negro C, Fiorito A, Petronio L. Risk of occupational hypoacusis caused by combined exposure to continuous and impulsive noise. *La Medicina del lavoro*. 1982;73(5):515-25.

Bozhko AP, Gorodetskaia IV. The enhancement of body resistance to combined exposure to immobilization and cold with thyroid hormones. *Nauchnye doklady vysshei shkoly Biologicheskie nauki*. 1991(11):80-6.

Bracesco N, Sosa V, Blanc L, Contreras V, Candreva EG, Salvo VA, et al. Analysis of radioprotection and antimutagenic effects of *Ilex paraguariensis* infusion and its component rutin. *Brazilian Journal of Medical and Biological Research*. 2018;51(9).

Brack W, Ait Aissa S, Backhaus T, Dulio V, Escher BI, Faust M, et al. Effect-based methods are key. The European Collaborative Project SOLUTIONS recommends integrating effect-based methods for diagnosis and monitoring of water quality. *Environmental Sciences Europe*. 2019;31.

Braga AC, Camacho C, Marques A, Gago-Martinez A, Pacheco M, Costa PR. Combined effects of warming and acidification on accumulation and elimination dynamics of paralytic shellfish toxins in mussels *Mytilus galloprovincialis*. *Environmental Research*. 2018;164:647-54.

Braicu C, Selicean S, Cojocneanu-Petric R, Lajos R, Balacescu O, Taranu I, et al. Evaluation of cellular and molecular impact of zearalenone and *Escherichia coli* co-exposure on IPEC-1 cells using microarray technology. *BMC genomics*. 2016;17:576.

Brandts I, Teles M, Goncalves AP, Barreto A, Franco-Martinez L, Tvarijonaviciute A, et al. Effects of nanoplastics on *Mytilus galloprovincialis* after individual and combined exposure with carbamazepine. *Science of the Total Environment*. 2018;643:775-84.

Brauer RW, Dutcher JA, Vorus WS. Effects of prolonged simultaneous exposure of CD-1 mice to high pressures and inert gas narcosis. *Journal of applied physiology* (Bethesda, Md : 1985). 1986;61(6):2129-35.

Brault M, Olsen TM, Martinez J, Stetson DB, Oberst A. Intracellular Nucleic Acid Sensing Triggers Necroptosis through Synergistic Type I IFN and TNF Signaling. *Journal of immunology* (Baltimore, Md : 1950). 2018;200(8):2748-56.

Breitholtz M, Nyholm JR, Karlsson J, Andersson PL. Are individual NOEC levels safe for mixtures? A study on mixture toxicity of brominated flame-retardants in the copepod *Nitocra spinipes*. *Chemosphere*. 2008;72(9):1242-9.

Brescia F, Sarti M, Massa R, Calabrese ML, Sannino A, Scarfi MR. Reactive oxygen species formation is not enhanced by exposure to UMTS 1950 MHz radiation and co-exposure to ferrous ions in Jurkat cells. *Bioelectromagnetics*. 2009;30(7):525-35.

Broadrup RL, Mayack C, Schick SJ, Eppley EJ, White HK, Macherone A. Honey bee (*Apis mellifera*) exposomes and dysregulated metabolic pathways associated with *Nosema ceranae* infection. *Plos One*. 2019;14(3).

Brooks AJ, Wolfenden B, Downes BJ, Lancaster J. Barriers to dispersal: The effect of a weir on stream insect drift. *River Research and Applications*. 2018;34(10):1244-53.

Brown A, Foss A, Miller MA, Gibson Q. Detection of cyanotoxins (microcystins/nodularins) in livers from estuarine and coastal bottlenose dolphins (*Tursiops truncatus*) from Northeast Florida. *Harmful Algae*. 2018;76:22-34.

Brown AR, Hosken DJ, Balloux F, Bickley LK, LePage G, Owen SF, et al. Genetic variation, inbreeding and chemical exposure--combined effects in wildlife and critical considerations for ecotoxicology. *Philosophical transactions of the Royal Society of London Series B, Biological sciences*. 2009;364(1534):3377-90.

Brumen V, Horvat D, Trosic I. Potential genotoxic risk related to simultaneous exposure to radionuclides and cytostatics. *American journal of industrial medicine*. 1995;27(6):871-6.

Brunst KJ, Sanchez-Guerra M, Chiu YHM, Wilson A, Coull BA, Kloog I, et al. Prenatal particulate matter exposure and mitochondrial dysfunction at the maternal-fetal interface: Effect modification by maternal lifetime trauma and child sex. *Environment International*. 2018;112:49-58.

Bucher S, Tete A, Podechard N, Liamin M, Le Guillou D, Chevanne M, et al. Co-exposure to benzo a pyrene and ethanol induces a pathological progression of liver steatosis in vitro and in vivo. *Scientific reports*. 2018;8(1):5963.

Bucher S, Tete A, Podechard N, Liamin M, Le Guillou D, Chevanne M, et al. Co-exposure to benzo a pyrene and ethanol induces a pathological progression of liver steatosis in vitro and in vivo. *Scientific Reports*. 2018;8.

Bueno-Pallero FA, Blanco-Perez R, Dionisio L, Campos-Herrera R. Simultaneous exposure of nematophagous fungi, entomopathogenic nematodes and entomopathogenic fungi can modulate belowground insect pest control. *Journal of Invertebrate Pathology*. 2018;154:85-94.

Buha A, Antonijevic B, Bulat Z, Jacevic V, Milovanovic V, Matovic V. The impact of prolonged cadmium exposure and co-exposure with polychlorinated biphenyls on thyroid function in rats. *Toxicology letters*. 2013;221(2):83-90.

Bukharin EA, Vladimirov VN, Svistunov NT. Certain characteristics of the motorists' body reaction to short-term exposure to combined effects of exhaust gases, noise and vibration. *Gigiena truda i professional'nye zabolevaniia*. 1977(9):46-8.

Buldakov LA, Dement'ev SI, Levдик TI. Longevity of animals in combined exposure to total gamma irradiation and incorporated plutonium-239. *Radiobiologiya*. 1987;27(1):123-6.

Buldakov LA, Levдик TI. Long-term effects of combined exposure to external ¹³⁷Cs gamma-radiation and incorporated ²³⁹Pu. *Radiobiologiya*. 1984;24(5):668-71.

Bundschuh M, Appeltauer A, Dabrunz A, Schulz R. Combined effect of invertebrate predation and sublethal pesticide exposure on the behavior and survival of *Asellus aquaticus* (Crustacea; Isopoda). *Archives of environmental contamination and toxicology*. 2012;63(1):77-85.

Bu-Olayan AH, Thomas BV. Combined toxicity of mercury and plastic wastes to crustacean and gastropod inhabiting the waters in Kuwait. *Journal of environmental biology*. 2015;36(6):1291-6.

Burkart W, Jung T. Health risks from combined exposures: mechanistic considerations on deviations from additivity. *Mutation research*. 1998;411(2):119-28.

Burke KE. Mechanisms of aging and development-A new understanding of environmental damage to the skin and prevention with topical antioxidants. *Mechanisms of Ageing and Development*. 2018;172:123-30.

Burks TN, Marx R, Powell L, Rucker J, Bedja D, Heacock E, et al. Combined effects of aging and inflammation on renin-angiotensin system mediate mitochondrial dysfunction and phenotypic changes in cardiomyopathies. *Oncotarget*. 2015;6(14):11979-93.

Burraco P, Iglesias-Carrasco M, Cabido C, Gomez-Mestre I. Eucalypt leaf litter impairs growth and development of amphibian larvae, inhibits their antipredator responses and alters their physiology. *Conservation Physiology*. 2018;6.

Bussolaro D, Wright SL, Schnell S, Schirmer K, Bury NR, Arlt VM. Co-exposure to polystyrene plastic beads and polycyclic aromatic hydrocarbon contaminants in fish gill (RTgill-W1) and intestinal (RTgutGC) epithelial cells derived from rainbow trout (*Oncorhynchus mykiss*). *Environmental Pollution*. 2019;248:706-14.

Butler TR, Berry JN, Sharrett-Field LJ, Pauly JR, Prendergast MA. Long-term ethanol and corticosterone co-exposure sensitize the hippocampal ca1 region pyramidal cells to insult during ethanol withdrawal in an NMDA GluN2B subunit-dependent manner. *Alcoholism, clinical and experimental research*. 2013;37(12):2066-73.

Byzitter J, Lukowiak K, Karnik V, Dalesman S. Acute combined exposure to heavy metals (Zn, Cd) blocks memory formation in a freshwater snail. *Ecotoxicology (London, England)*. 2012;21(3):860-8.

Cai YP, Chen HY, Chen HL, Li HQ, Yang S, Wang F. Evaluation of Single and Joint Toxicity of Perfluorinated Carboxylic Acids and Copper to Metal-Resistant *Arthrobacter* Strains. *International Journal of Environmental Research and Public Health*. 2019;16(1).

Calafat AM, Ye X, Valentin-Blasini L, Li Z, Mortensen ME, Wong L-Y. Co-exposure to non-persistent organic chemicals among American pre-school aged children: A pilot study. *International journal of hygiene and environmental health*. 2017;220(2 Pt A):55-63.

Calapez AR, Serra SRQ, Santos JM, Branco P, Ferreira T, Hein T, et al. The effect of hypoxia and flow decrease in macroinvertebrate functional responses: A trait-based approach to multiple-stressors in mesocosms. *Science of the Total Environment*. 2018;637:647-56.

Calatayud M, Dezutter O, Hernandez-Sanabria E, Hidalgo-Martinez S, Meysman FJR, Van de Wiele T. Development of a host-microbiome model of the small intestine. *Faseb Journal*. 2019;33(3):3985-96.

Camero S, Ceccarelli S, De Felice F, Marampon F, Mannarino O, Camicia L, et al. PARP inhibitors affect growth, survival and radiation susceptibility of human alveolar and embryonal rhabdomyosarcoma cell lines. *Journal of Cancer Research and Clinical Oncology*. 2019;145(1):137-52.

Campion SN, Catlin N, Houseman EA, Hensley J, Sui Y, Gaido KW, et al. Molecular alterations underlying the enhanced disruption of spermatogenesis by 2,5-hexanedione and carbendazim co-exposure. *Reproductive toxicology* (Elmsford, NY). 2012;33(3):382-9.

Campo P, Lataye R, Cossec B, Villette V, Roure M, Barthelemy C. Combined effects of simultaneous exposure to toluene and ethanol on auditory function in rats. *Neurotoxicology and teratology*. 1998;20(3):321-32.

Cang T, Dai D, Yang G, Yu Y, Lv L, Cai L, et al. Combined toxicity of imidacloprid and three insecticides to the earthworm, *Eisenia fetida* (Annelida, Oligochaeta). *Environmental science and pollution research international*. 2017;24(9):8722-30.

Cano DM, Parreno GM, Garcia SM, Barreira B, Callejo M, Ruiz SE, et al. Effects of *Schistosoma Mansoni* and HIV-1 Co-Exposure on Pulmonary Vascular Pathology. *American Journal of Respiratory and Critical Care Medicine*. 2019;199.

Cao C, Wang Q, Jiao F, Zhu G. Impact of co-exposure with butachlor and triadimefon on thyroid endocrine system in larval zebrafish. *Experimental and toxicologic pathology : official journal of the Gesellschaft fur Toxikologische Pathologie*. 2016;68(8):463-9.

Cao Q, Steinman AD, Wan X, Xie L. Combined toxicity of microcystin-LR and copper on lettuce (*Lactuca sativa* L.). *Chemosphere*. 2018;206:474-82.

Cao Q, Steinman AD, Wan X, Xie LQ. Combined toxicity of microcystin-LR and copper on lettuce (*Lactuca sativa* L.). *Chemosphere*. 2018;206:474-82.

Cao RW, Liu YL, Wang Q, Dong ZJ, Yang DL, Liu H, et al. Seawater acidification aggravated cadmium toxicity in the oyster *Crassostrea gigas*: Metal

bioaccumulation, subcellular distribution and multiple physiological responses. *Science of the Total Environment*. 2018;642:809-23.

Cao RW, Liu YL, Wang Q, Zhang QQ, Yang DL, Liu H, et al. The impact of ocean acidification and cadmium on the immune responses of Pacific oyster, *Crassostrea gigas*. *Fish & Shellfish Immunology*. 2018;81:456-62.

Capela D, Poissenot K, Dombret C, Keller M, Franceschini I, Mhaouty-Kodja S. Effects of combined exposure of adult male mice to di-(2-ethylexyl) phthalate and nonylphenol on behavioral and neuroendocrine responses. *Chemosphere*. 2019;221:573-82.

Capjak I, Avdicevic MZ, Sikiric MD, Jurasin DD, Hozic A, Pajic D, et al. Behavior of silver nanoparticles in wastewater: systematic investigation on the combined effects of surfactants and electrolytes in model systems. *Environmental Science-Water Research & Technology*. 2018;4(12):2146-59.

Cappaert NL, Klis SF, Muijsers H, Kulig BM, Smoorenburg GF. Simultaneous exposure to ethyl benzene and noise: synergistic effects on outer hair cells. *Hearing research*. 2001;162(1-2):67-79.

Carbajo JB, Perdigon-Melon JA, Petre AL, Rosal R, Leton P, Garcia-Calvo E. Personal care product preservatives: risk assessment and mixture toxicities with an industrial wastewater. *Water research*. 2015;72:174-85.

Cardona A, Marhuenda D, Prieto MJ, Marti J, Periago JF, Sanchez JM. Behaviour of urinary 2,5-hexanedione in occupational co-exposure to n-hexane and acetone. *International archives of occupational and environmental health*. 1996;68(2):88-93.

Cardoso PG, Loganimoce EM, Neuparth T, Rocha MJ, Rocha E, Arenas F. Interactive effects of increased temperature, &ITp&ITCO₂ and the synthetic progestin levonorgestrel on the fitness and breeding of the amphipod &ITGammarus locusta&IT. *Environmental Pollution*. 2018;236:937-47.

Cardoso PG, Rodrigues D, Madureira TV, Rocha MJ, Rocha E. Histopathological Evaluation of Combined Impacts of the Synthetic Progestin Levonorgestrel and Temperature on the Female Zebrafish Maturation Using a Semi-quantitative Grading AnalysisIs it Enough? *Bulletin of Environmental Contamination and Toxicology*. 2018;101(4):417-22.

Carfagna MA, Ponsler GD, Muhoberac BB. Inhibition of ATPase activity in rat synaptic plasma membranes by simultaneous exposure to metals. *Chemico-biological interactions*. 1996;100(1):53-65.

Carles L, Joly M, Bonnemoy F, Leremboure M, Donnadieu F, Batisson I, et al. Biodegradation and toxicity of a maize herbicide mixture: mesotrione, nicosulfuron and S-metolachlor. *Journal of Hazardous Materials*. 2018;354:42-53.

Carlsten C, Brauer M, Dimich-Ward H, Dybuncio A, Becker AB, Chan-Yeung M. Combined exposure to dog and indoor pollution: incident asthma in a high-risk birth cohort. *The European respiratory journal*. 2011;37(2):324-30.

Carpy SA, Kobel W, Doe J. Health risk of low-dose pesticides mixtures: a review of the 1985-1998 literature on combination toxicology and health risk assessment. *Journal of toxicology and environmental health Part B, Critical reviews*. 2000;3(1):1-25.

Cary R, Clarke S, Delic J. Effects of combined exposure to noise and toxic substances--critical review of the literature. *The Annals of occupational hygiene*. 1997;41(4):455-65.

Casado JM, Theumer M, Masih DT, Chulze S, Rubinstein HR. Experimental subchronic mycotoxicoses in mice: individual and combined effects of dietary exposure to fumonisins and aflatoxin B1. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2001;39(6):579-86.

Catlin NR, Huse SM, Boekelheide K. The stage-specific testicular germ cell apoptotic response to low-dose radiation and 2,5-hexanedione combined exposure. II: qRT-PCR array analysis reveals dose dependent adaptive alterations in the apoptotic pathway. *Toxicologic pathology*. 2014;42(8):1229-37.

Catlin NR, Huse SM, Boekelheide K. The stage-specific testicular germ cell apoptotic response to low-dose X-irradiation and 2,5-hexanedione combined exposure. I: Validation of the laser capture microdissection method for qRT-PCR array application. *Toxicologic pathology*. 2014;42(8):1221-8.

Cato K, Sylven SM, Georgakis MK, Kollia N, Rubertsson C, Skalkidou A. Antenatal depressive symptoms and early initiation of breastfeeding in association with exclusive breastfeeding six weeks postpartum: a longitudinal population-based study. *Bmc Pregnancy and Childbirth*. 2019;19.

Cedergreen N, Abbaspour M, Sorensen H, Streibig JC. Is mixture toxicity measured on a biomarker indicative of what happens on a population level? A study with *Lemna minor*. *Ecotoxicology and environmental safety*. 2007;67(3):323-32.

Cedergreen N, Kudsk P, Mathiassen SK, Sorensen H, Streibig JC. Reproducibility of binary-mixture toxicity studies. *Environmental toxicology and chemistry*. 2007;26(1):149-56.

Cedergreen N, Sorensen H, Svendsen C. Can the joint effect of ternary mixtures be predicted from binary mixture toxicity results? *The Science of the total environment*. 2012;427-428:229-37.

Cedergreen N. Quantifying synergy: a systematic review of mixture toxicity studies within environmental toxicology. *PloS one*. 2014;9(5):e96580.

Cerna S, Hurbankova M, Kovacikova Z, Beno M, Wimmerova S. Lung cytotoxicity of combined exposure to refractory ceramic fibres and cigarette smoke. *Biomedical papers of the Medical Faculty of the University Palacky, Olomouc, Czechoslovakia*. 2005;149(2):381-4.

Cerna T, Hrabeta J, Eckschlager T, Frei E, Schmeiser HH, Arlt VM, et al. The Histone Deacetylase Inhibitor Valproic Acid Exerts a Synergistic Cytotoxicity with the DNA-Damaging Drug Ellipticine in Neuroblastoma Cells. *International Journal of Molecular Sciences*. 2018;19(1).

Cervilha DAB, Ito JT, Lourenco JD, Olivo CR, Saraiva-Romanholo BM, Volpini RA, et al. The Th17/Treg Cytokine Imbalance in Chronic Obstructive Pulmonary Disease Exacerbation in an Animal Model of Cigarette Smoke Exposure and Lipopolysaccharide Challenge Association. *Scientific Reports*. 2019;9.

Chakraborty P, Sampath S, Mukhopadhyay M, Selvaraj S, Bharat GK, Nizzetto L. Baseline investigation on plasticizers, bisphenol A, polycyclic aromatic hydrocarbons and heavy metals in the surface soil of the informal electronic waste recycling workshops and nearby open dumpsites in Indian metropolitan cities. *Environmental Pollution*. 2019;248:1036-45.

Chakraborty PK, Mustafi SB, Raha S. Pro-survival effects of repetitive low-grade oxidative stress are inhibited by simultaneous exposure to Resveratrol. *Pharmacological research*. 2008;58(5-6):281-9.

Chakraborty TR, Gomez V, Adhikari D, Chakraborty S. The Synergism in Hormonal and Cellular Changes in Male Mice on Long Term High Fat Exposure. *Journal of the American College of Nutrition*. 2018;37(4):328-35.

Chakravarti LJ, Negri AP, van Oppen MJH. Thermal and Herbicide Tolerances of Chromerid Algae and Their Ability to Form a Symbiosis With Corals. *Frontiers in Microbiology*. 2019;10.

Chalansonnet M, Carreres-Pons M, Venet T, Thomas A, Merlen L, Seidel C, et al. Combined exposure to carbon disulfide and low-frequency noise reversibly affects vestibular function. *Neurotoxicology*. 2018;67:270-8.

Chandra A, Lahiri A, Senapati S, Basu B, Ghosh S, Mukhopadhyay I, et al. Increased Risk of Psoriasis due to combined effect of HLA-Cw6 and LCE3 risk alleles in Indian population. *Scientific reports*. 2016;6:24059.

Chandra SV, Murthy RC, Saxena DK, Lal B. Effects of pre- and postnatal combined exposure to Pb and Mn on brain development in rats. *Industrial health*. 1983;21(4):273-9.

Chang CH, Yu CJ, Du JC, Chiou HC, Chen HC, Yang W, et al. The interactions among organophosphate pesticide exposure, oxidative stress, and genetic polymorphisms of dopamine receptor D4 increase the risk of attention deficit/hyperactivity disorder in children. *Environmental Research*. 2018;160:339-46.

Chang CM, Ou YH, Liu TC, Lu SY, Wang MK. A quantitative structure-activity relationship approach for assessing toxicity of mixture of organic compounds. *SAR and QSAR in environmental research*. 2016;27(6):441-53.

Chang HW, Shen DH, Kou SY. STUDIES ON THE COMBINED TOXICITIES OF ANTIMONIALS AND ARSENICALS. *Yao xue xue bao = Acta pharmaceutica Sinica*. 1964;11:370-4.

Chang HW, Shen DH. STUDIES ON THE COMBINED TOXICITY OF TARTAR EMETIC AND SODIUM ANTIMONY GLUCONATE. *Yao xue xue bao = Acta pharmaceutica Sinica*. 1964;11:568-70.

Chang H-W, Tang J-Y, Yen C-Y, Chang H-S, Huang H-W, Chung Y-A, et al. Synergistic anti-oral cancer effects of UVC and methanolic extracts of *Cryptocarya concinna* roots via apoptosis, oxidative stress and DNA damage. *International journal of radiation biology*. 2016;92(5):263-72.

Chang H-Y, Shih T-S, Cheng C-C, Tsai C-Y, Lai J-S, Wang V-S. The effects of co-exposure to methyl ethyl ketone on the biological monitoring of occupational exposure to N,N-dimethylformamide. *International archives of occupational and environmental health*. 2003;76(2):121-8.

Chang H-Y, Yun Y-D, Yu Y-C, Shih T-S, Lin M-S, Kuo H-W, et al. The effects of simultaneous exposure to methyl ethyl ketone and toluene on urinary biomarkers of occupational N,N-dimethylformamide exposure. *Toxicology letters*. 2005;155(3):385-95.

Chang J-W, Chen H-L, Su H-J, Liao P-C, Guo H-R, Lee C-C. Simultaneous exposure of non-diabetics to high levels of dioxins and mercury increases their risk of insulin resistance. *Journal of hazardous materials*. 2011;185(2-3):749-55.

Chang MJ, Singh NP, Hart RW. Effects of chrysotile co-exposure on BaP binding in normal human fibroblasts. *Environmental health perspectives*. 1983;51:241-4.

Chang T-Y, Wang V-S, Hwang B-F, Yen H-Y, Lai J-S, Liu C-S, et al. Effects of co-exposure to noise and mixture of organic solvents on blood pressure. *Journal of occupational health*. 2009;51(4):332-9.

Chang T-Y, Wang V-S, Lin S-Y, Yen H-Y, Lai J-S, Liu C-S. Co-exposure to noise, N,N-dimethylformamide, and toluene on 24-hour ambulatory blood pressure in synthetic leather workers. *Journal of occupational and environmental hygiene*. 2010;7(1):14-22.

Chang WH, Lee CC, Yen YH, Chen HL. Oxidative damage in patients with benign prostatic hyperplasia and prostate cancer co-exposed to phthalates and to trace elements. *Environment International*. 2018;121:1179-84.

Chapman WH, Cronkite EP, Chambers FW, Jr., Morgan JE. Experimental procedures for the simultaneous exposure of large numbers of animals to total body x-radiation. *Radiology*. 1951;57(1):90-8.

Chara-Serna AM, Richardson JS. Chlorpyrifos interacts with other agricultural stressors to alter stream communities in laboratory microcosms. *Ecological Applications*. 2018;28(1):162-76.

Charrieau LM, Filipsson HL, Nagai Y, Kawada S, Ljung K, Kritzberg E, et al. Decalcification and survival of benthic foraminifera under the combined impacts of varying pH and salinity. *Marine Environmental Research*. 2018;138:36-45.

Chartoumpekis DV, Palliyaguru DL, Wakabayashi N, Fazzari M, Khoo NK, Schopfer FJ, et al. Nrf2 deletion from adipocytes, but not hepatocytes, potentiates systemic metabolic dysfunction after long-term high-fat diet-induced obesity in mice. *American journal of physiology Endocrinology and metabolism*. 2018.

Chatio S, Aborigo R, Adongo PB, Anyorigiya T, Dalinjong PA, Akweongo P, et al. Factors influencing adverse events reporting within the health care system: the case of artemisinin-based combination treatments in northern Ghana. *Malaria journal*. 2016;15:125.

Chatterjee S, Kapoor A, Akiyama JA, Auer DR, Lee D, Gabriel S, et al. Enhancer Variants Synergistically Drive Dysfunction of a Gene Regulatory Network In Hirschsprung Disease. *Cell*. 2016;167(2):355-68.e10.

Chatterjee S, Rhee Y-H, Ahn J-C. Sulforaphene-Carboplatin Combination Synergistically Enhances Apoptosis by Disruption of Mitochondrial Membrane Potential and Cell Cycle Arrest in Human Non-Small Cell Lung Carcinoma. *Journal of medicinal food*. 2016;19(9):860-9.

Chattopadhyay A, Pinkaew D, Doan HQ, Jacob RB, Verma SK, Friedman H, et al. Fortilin potentiates the peroxidase activity of Peroxiredoxin-1 and protects against alcohol-induced liver damage in mice. *Scientific reports*. 2016;6:18701.

Che HY, Zeng SK, Guo JB, Wang Y. Reliability modeling for dependent competing failure processes with mutually dependent degradation process and shock process. *Reliability Engineering & System Safety*. 2018;180:168-78.

Che WW, Frey HC, Lau AKH. Sequential Measurement of Intermodal Variability in Public Transportation PM2.5 and CO Exposure Concentrations. *Environmental science & technology*. 2016;50(16):8760-9.

Chebotarev EE, Demina EA. Damage susceptibility of human lymphocyte chromosomes at different stages of the mitotic cycle in combined exposure to fast neutrons and postradiation hyperthermia. *TSitologiya i genetika*. 1988;22(2):62-6.

Cheloni G, Gagnaux V, Slaveykova VI. Species-species interactions modulate copper toxicity under different visible light conditions. *Ecotoxicology and Environmental Safety*. 2019;170:771-7.

Cheloni G, Slaveykova VI. Combined Effects of Trace Metals and Light on Photosynthetic Microorganisms in Aquatic Environment. *Environments*. 2018;5(7).

Chen C, Jiang X, Ren Y, Zhang Z. Arsenic trioxide co-exposure potentiates benzo(a)pyrene genotoxicity by enhancing the oxidative stress in human lung adenocarcinoma cell. *Biological trace element research*. 2013;156(1-3):338-49.

Chen C, Liu C, Chen RJ, Wang WB, Li WH, Kan HD, et al. Ambient air pollution and daily hospital admissions for mental disorders in Shanghai, China. *Science of the Total Environment*. 2018;613:324-30.

Chen C, Wang D, Wang H, Lin Z, Fang Z. A SAR-based mechanistic study on the combined toxicities of sulfonamides and quorum sensing inhibitors on *Escherichia coli*. *SAR and QSAR in environmental research*. 2017;28(7):595-608.

Chen C, Wang Y, Zhao X, Qian Y, Wang Q. Combined toxicity of butachlor, atrazine and lambda-cyhalothrin on the earthworm *Eisenia fetida* by combination index (CI)-isobologram method. *Chemosphere*. 2014;112:393-401.

Chen C, Wang Y, Zhao X, Wang Q, Qian Y. The combined toxicity assessment of carp (*Cyprinus carpio*) acetylcholinesterase activity by binary mixtures of chlorpyrifos and four other insecticides. *Ecotoxicology (London, England)*. 2014;23(2):221-8.

Chen C-H, Huang K-Y, Wang J-Y, Huang H-B, Chou P, Lee C-C. Combined effect of individual and neighbourhood socioeconomic status on mortality of rheumatoid arthritis patients under universal health care coverage system. *Family practice*. 2015;32(1):41-8.

Chen C-Y, Chen S-L, Christensen ER. Individual and combined toxicity of nitriles and aldehydes to *Raphidocelis subcapitata*. *Environmental toxicology and chemistry*. 2005;24(5):1067-73.

Chen F, Yao Q, Zhou X. The Influence of Suspended Solids on the Combined Toxicity of Galaxolide and Lead to *Daphnia magna*. *Bulletin of environmental contamination and toxicology*. 2015;95(1):73-9.

Chen G, Geiling EMK. The acute joint toxicity of atabrine, quinine, hydroxyethylapocupreine, pamaquine and pentaquine. *The Journal of pharmacology and experimental therapeutics*. 1947;91(2):133-9.

Chen G, Geiling EMK. The joint toxicity of atabrine and quinine, atabrine and plasmochin, quinine and plasmochin. *Federation proceedings*. 1946;5(1 Pt 2):170.

Chen G-D, Henderson D. Cochlear injuries induced by the combined exposure to noise and styrene. *Hearing research*. 2009;254(1-2):25-33.

Chen H, Cheng YY, Meng D, Xue G, Jiang MJ, Li X. Joint effect of triclosan and copper nanoparticles on wastewater biological nutrient removal. *Environmental Technology*. 2018;39(19):2447-56.

Chen H, Lam JCW, Zhu MS, Wang F, Zhou W, Du BB, et al. Combined Effects of Dust and Dietary Exposure of Occupational Workers and Local Residents to Short- and Medium-Chain Chlorinated Paraffins in a Mega E-Waste Recycling Industrial Park in South China. *Environmental Science & Technology*. 2018;52(20):11510-9.

Chen H, Lin T, Chen W, Tao H, Xu H. Removal of disinfection byproduct precursors and reduction in additive toxicity of chlorinated and chloraminated

waters by ozonation and up-flow biological activated carbon process. *Chemosphere*. 2019;216:624-32.

Chen H, Lin T, Chen W. The combined toxicity of UV/chlorinated products from binary ibuprofen (IBP) and tyrosine (Tyr) on *Escherichia coli*: Emphasis on their occurrence and underlying mechanism. *Chemosphere*. 2018;210:503-10.

Chen J, Liao Y, Zhao Y, Wang L, Lu G, Zhao T. Quantitative structure-activity relationships and mixture toxicity studies of heterocyclic nitrogen compounds. *Bulletin of environmental contamination and toxicology*. 1996;57(1):77-83.

Chen J, Ling M, Fu X, Lopez JA, Chung DW. Simultaneous exposure of sites in von Willebrand factor for glycoprotein Ib binding and ADAMTS13 cleavage: studies with ristocetin. *Arteriosclerosis, thrombosis, and vascular biology*. 2012;32(11):2625-30.

Chen J, van Dongen MA, Merzel RL, Dougherty CA, Orr BG, Kanduluru AK, et al. Substrate-Triggered Exosite Binding: Synergistic Dendrimer/Folic Acid Action for Achieving Specific, Tight-Binding to Folate Binding Protein. *Biomacromolecules*. 2016;17(3):922-7.

Chen JF, Ma X, Tian LJ, Kong AJ, Wang NZ, Huang CJ, et al. Chronic co-exposure to low levels of brominated flame retardants and heavy metals induces reproductive toxicity in zebrafish. *Toxicology and Industrial Health*. 2018;34(9):631-9.

Chen L, Jiang X, Feng H, Shi H, Sun L, Tao W, et al. Simultaneous exposure to estrogen and androgen resulted in feminization and endocrine disruption. *The Journal of endocrinology*. 2016;228(3):205-18.

Chen L, Luo K, Etzel R, Zhang XY, Tian Y, Zhang J. Co-exposure to environmental endocrine disruptors in the US population. *Environmental Science and Pollution Research*. 2019;26(8):7665-76.

Chen L, Wang ZP, Qian C, He YC. Effects of inorganic anions on the photolysis of triclosan under UV irradiation. *Water Science and Technology*. 2018;78(7):1476-80.

Chen L, Xie M, Bi Y, Wang G, Deng S, Liu Y. The combined effects of UV-B radiation and herbicides on photosynthesis, antioxidant enzymes and DNA damage in two bloom-forming cyanobacteria. *Ecotoxicology and environmental safety*. 2012;80:224-30.

Chen LG, Guo YY, Hu CY, Lam PKS, Lam JCW, Zhou BS. Dysbiosis of gut microbiota by chronic coexposure to titanium dioxide nanoparticles and bisphenol A: Implications for host health in zebrafish. *Environmental Pollution*. 2018;234:307-17.

Chen LG, Hu CY, Guo YY, Shi QP, Zhou BS. TiO₂ nanoparticles and BPA are combined to impair the development of offspring zebrafish after parental coexposure. *Chemosphere*. 2019;217:732-41.

Chen L-W, Wang Y-Q, Bian G-L, Wei L-C, Yung K-L. Neurokinin-3 peptide instead of neurokinin-1 synergistically exacerbates kainic acid-inducing degeneration of neurons in the substantia nigra of mice. *Journal of neurochemistry*. 2008;105(1):203-16.

Chen S, Qu M, Ding J, Zhang Y, Wang Y, Di Y. BaP-metals co-exposure induced tissue-specific antioxidant defense in marine mussels *Mytilus coruscus*. *Chemosphere*. 2018;205:286-96.

Chen SY, Qu MJ, Ding JW, Zhang YF, Wang Y, Di YA. BaP-metals co-exposure induced tissue-specific antioxidant defense in marine mussels *Mytilus coruscus*. *Chemosphere*. 2018;205:286-96.

Chen X, An H, Ao L, Sun L, Liu W, Zhou Z, et al. The combined toxicity of dibutyl phthalate and benzo(a)pyrene on the reproductive system of male Sprague Dawley rats in vivo. *Journal of hazardous materials*. 2011;186(1):835-41.

Chen X, Li H, You J. Joint toxicity of sediment-associated permethrin and cadmium to *Chironomus dilutus*: The role of bioavailability and enzymatic activities. *Environmental pollution (Barking, Essex : 1987)*. 2015;207:138-44.

Chen X, Qin B, Li X, Jin T, Zhu G, Zhou W, et al. Effects of fluoride and cadmium co-exposure on bone in male rats. *Biological trace element research*. 2013;154(3):396-402.

Chen X, Wang H, Fu Y, Liu J, Liu RZ. The Radiosensitizing Effect of Nanodiamonds (NDs) on HeLa Cells Under X-Ray Irradiation. *Physica Status Solidi a-Applications and Materials Science*. 2018;215(6).

Chen X, Wang K, Wang Z, Gan C, He P, Liang Y, et al. Effects of lead and cadmium co-exposure on bone mineral density in a Chinese population. *Bone*. 2014;63:76-80.

Chen X, Zhou H, Li X, Wang Z, Zhu G, Jin T. Effects of lead and cadmium co-exposure on hemoglobin in a Chinese population. *Environmental toxicology and pharmacology*. 2015;39(2):758-63.

Chen X, Zhu GY, Wang ZQ, Zhou H, He P, Liu YK, et al. The association between lead and cadmium co-exposure and renal dysfunction. *Ecotoxicology and Environmental Safety*. 2019;173:429-35.

Chen XX, Xu J, Liu DD, Sun YH, Qian G, Xu SW, et al. The aggravating effect of selenium deficiency on T-2 toxin-induced damage on primary cardiomyocyte results from a reduction of protective autophagy. *Chemico-Biological Interactions*. 2019;300:27-34.

Chen Y, Gao Q, Chen WX, Wu F, Yang Y, Werner D, et al. A mechanistic study of stable dispersion of titanium oxide nanoparticles by humic acid. *Water Research*. 2018;135:85-94.

Chen Y, Lin PZ. Bayesian network of risk assessment for a super-large dam exposed to multiple natural risk sources. *Stochastic Environmental Research and Risk Assessment*. 2019;33(2):581-92.

Chen Y-F, Pandey S, Day CH, Chen Y-F, Jiang A-Z, Ho T-J, et al. Synergistic effect of HIF-1 α and FoxO3a trigger cardiomyocyte apoptosis under hyperglycemic ischemia condition. *Journal of cellular physiology*. 2018;233(4):3660-71.

Chen YT, Liu YG. Non-coplanar and coplanar polychlorinated biphenyls potentiate genotoxicity of aflatoxin B1 in a human hepatocyte line by enhancing CYP1A2 and CYP3A4 expression. *Environmental Pollution*. 2019;246:945-54.

Chen YY, Chan KM. Modulations of TCDD-mediated induction of zebrafish *cyp1a1* and the AHR pathway by administering Cd²⁺ in vivo. *Chemosphere*. 2018;210:577-87.

Cheng HC, Yan W, Wu Q, Lu JL, Liu CS, Hung TC, et al. Adverse reproductive performance in zebrafish with increased bioconcentration of microcystin-LR in the presence of titanium dioxide nanoparticles. *Environmental Science-Nano*. 2018;5(5):1208-17.

Cheng JR, Wang K, Yu J, Yu ZX, Yu XB, Zhang ZZ. Distribution and fate modeling of 4-nonylphenol, 4-t-octylphenol, and bisphenol A in the Yong River of China. *Chemosphere*. 2018;195:594-605.

Cheng L, Zhou JL, Cheng JP. Bioaccumulation, tissue distribution and joint toxicity of erythromycin and cadmium in Chinese mitten crab (*Eriocheir sinensis*). *Chemosphere*. 2018;210:267-78.

Cherkasov AS, Ringwood AH, Sokolova IM. Combined effects of temperature acclimation and cadmium exposure on mitochondrial function in

eastern oysters *Crassostrea virginica* gmelin (Bivalvia: Ostreidae). *Environmental toxicology and chemistry*. 2006;25(9):2461-9.

Cherniuk VI. Combined exposure to vibration and the noise of agricultural tractors and self-propelled machinery and the tasks of hygienic regulation (a review of the literature). *Gigiena truda i professional'nye zabolevaniia*. 1984(9):35-7.

Chernook TB, Abdyldabekov TK, Kurmanalieva RD. Human functional status in combined exposure to industrial factors and mining migrations. *Gigiena truda i professional'nye zabolevaniia*. 1992(8):20-2.

Chi YL, Lin Y, Zhu HM, Huang QS, Ye GZ, Dong SJ. PCBs-high-fat diet interactions as mediators of gut microbiota dysbiosis and abdominal fat accumulation in female mice. *Environmental Pollution*. 2018;239:332-41.

Chia MA, Kramer BJ, Jankowiak JG, Bittencourt-Oliveira MD, Gobler CJ. The Individual and Combined Effects of the Cyanotoxins, Anatoxin-a and Microcystin-LR, on the Growth, Toxin Production, and Nitrogen Fixation of Prokaryotic and Eukaryotic Algae. *Toxins*. 2019;11(1).

Chinnappan M, Mohan A, Agarwal S, Dalvi P, Dhillon NK. Network of MicroRNAs Mediate Translational Repression of Bone Morphogenetic Protein Receptor-2: Involvement in HIV-Associated Pulmonary Vascular Remodeling. *Journal of the American Heart Association*. 2018;7(5).

Chinnasamy D, Fairbairn LJ, Neuenfeldt J, Treisman JS, Hanson JP, Jr., Margison GP, et al. Lentivirus-mediated expression of mutant MGMTP140K protects human CD34+ cells against the combined toxicity of O6-benzylguanine and 1,3-bis(2-chloroethyl)-nitrosourea or temozolomide. *Human gene therapy*. 2004;15(8):758-69.

Chiu C-C, Huang Y-T, Chuang H-L, Chen HH-C, Chung T-C. Co-exposure of lipopolysaccharide and *Pseudomonas aeruginosa* exotoxin A-induced multiple organ injury in rats. *Immunopharmacology and immunotoxicology*. 2009;31(1):75-82.

Chiu CJ, Cheng YY. Utility of Geriatric Syndrome Indicators for Predicting Subsequent Health Care Utilization in Older Adults in Taiwan. *International Journal of Environmental Research and Public Health*. 2019;16(3).

Chmut VG. Occupational allergic dermatoses resulting from combined exposure to metal allergens and polymers in work with polymer cement compounds. *Vestnik dermatologii i venerologii*. 1982(3):66-9.

Chmut VG. Sensitization state in combined exposure to chromium and polymeric materials. *Gigiena truda i professional'nye zabolevaniia*. 1981(10):26-8.

Cho SJ, Jung GY, Kim SH, Jang M, Yang DK, Kwak SK, et al. Monolithic heterojunction quasi-solid-state battery electrolytes based on thermodynamically immiscible dual phases. *Energy & Environmental Science*. 2019;12(2):559-65.

Cho SS, Kim H, Lee J, Lim S, Jeong WC. Combined exposure of emotional labor and job insecurity on depressive symptoms among female call-center workers A cross-sectional study. *Medicine*. 2019;98(12).

Cho Y, Turner ND, Davidson LA, Chapkin RS, Carroll RJ, Lupton JR. Colon cancer cell apoptosis is induced by combined exposure to the n-3 fatty acid docosahexaenoic acid and butyrate through promoter methylation. *Experimental biology and medicine* (Maywood, NJ). 2014;239(3):302-10.

Choi SJ, Widrick JJ. Combined effects of fatigue and eccentric damage on muscle power. *Journal of applied physiology* (Bethesda, Md : 1985). 2009;107(4):1156-64.

Choi Y, Park K, Kim I, Kim SD. Combined toxic effect of airborne heavy metals on human lung cell line A549. *Environmental Geochemistry and Health*. 2018;40(1):271-82.

Choi Y-H, Kim K. Noise-induced hearing loss in Korean workers: co-exposure to organic solvents and heavy metals in nationwide industries. *PloS one*. 2014;9(5):e97538.

Chou T-C, Sheu H-M, Chiu J-E, Wu J-D, Shih T-S, Chang H-Y. Combined exposure to carbon disulfide and sulfuric acid simultaneously increases the risk of hand dermatitis in rayon industry. *Journal of exposure analysis and environmental epidemiology*. 2004;14(7):551-7.

Christiansen S, Scholze M, Axelstad M, Boberg J, Kortenkamp A, Hass U. Combined exposure to anti-androgens causes markedly increased frequencies of hypospadias in the rat. *International journal of andrology*. 2008;31(2):241-8.

Chuang H-L, Chiu C-C, Chen T-H, Chen HH-C, Chu Y-Y, Huang Y-T. Different bacteria species lipopolysaccharide co-exposure with *Pseudomonas* exotoxin A on multiple organ injury induction. *Immunopharmacology and immunotoxicology*. 2009;31(4):616-24.

Chugh SN, Mittal A, Arora V, Yadav SP, Sood AK. Combined toxicity due to alcohol and aluminium phosphide. *The Journal of the Association of Physicians of India*. 1993;41(10):679-80.

Chulkin SG, Steshenkov AL, Breki AD, Lysenkov PM. MATHEMATICAL MODELING OF THE PROCESS OF RUNNING-IN PROPELLER SHAFTS. *Marine Intellectual Technologies*. 2019;3(4):76-86.

Ciaravino V, Meltz ML, Erwin DN. Effects of radiofrequency radiation and simultaneous exposure with mitomycin C on the frequency of sister chromatid exchanges in Chinese hamster ovary cells. *Environmental mutagenesis*. 1987;9(4):393-9.

Ciccocioppo R, Antonelli L, Biondini M, Perfumi M, Pompei P, Massi M. Memory impairment following combined exposure to delta(9)-tetrahydrocannabinol and ethanol in rats. *European journal of pharmacology*. 2002;449(3):245-52.

Cikrt M, Blaha K, Nerudova J, Bittnerova D, Jehlickova H, Jones MM. Distribution and excretion of cadmium and nickel after simultaneous exposure and the effect of N-benzyl-D-glucamine dithiocarbamate on their biliary and urinary excretion. *Journal of toxicology and environmental health*. 1992;35(4):211-20.

Cinone N, Letizia S, Santoro L, Facciorusso S, Armiento R, Picelli A, et al. Combined Effects of Isokinetic Training and Botulinum Toxin Type A on Spastic Equinus Foot in Patients with Chronic Stroke: A Pilot, Single-blind, Randomized Controlled Trial. *Toxins*. 2019;11(4).

Cipullo S, Snapir B, Prpich G, Campo P, Coulon F. Prediction of bioavailability and toxicity of complex chemical mixtures through machine learning models. *Chemosphere*. 2019;215:388-95.

Clay GD, Worrall F, Plummer R, Moody CS. Organic matter properties of Fennoscandian ecosystems: Potential oxidation of northern environments under future change? *Science of the Total Environment*. 2018;610:1496-504.

Cleuvers M. Mixture toxicity of the anti-inflammatory drugs diclofenac, ibuprofen, naproxen, and acetylsalicylic acid. *Ecotoxicology and environmental safety*. 2004;59(3):309-15.

Clewe O, Wicha SG, de Vogel CP, de Steenwinkel JEM, Simonsson USH. A model-informed preclinical approach for prediction of clinical pharmacodynamic interactions of anti-TB drug combinations. *Journal of Antimicrobial Chemotherapy*. 2018;73(2):437-47.

Clinton SK, Imrey PB, Mangian HJ, Nandkumar S, Vissek WJ. The combined effects of dietary fat, protein, and energy intake on azoxymethane-induced intestinal and renal carcinogenesis. *Cancer research*. 1992;52(4):857-65.

Coccini T, Randine G, Castoldi AF, Grandjean P, Ostendorp G, Heinzow B, et al. Effects of developmental co-exposure to methylmercury and 2,2',4,4',5,5'-hexachlorobiphenyl (PCB153) on cholinergic muscarinic receptors in rat brain. *Neurotoxicology*. 2006;27(4):468-77.

Coccini T, Roda E, Castoldi AF, Goldoni M, Poli D, Bernocchi G, et al. Perinatal co-exposure to methylmercury and PCB153 or PCB126 in rats alters the cerebral cholinergic muscarinic receptors at weaning and puberty. *Toxicology*. 2007;238(1):34-48.

Cohen MD, Zelikoff JT, Chen LC, Schlesinger RB. Immunotoxicologic effects of inhaled chromium: role of particle solubility and co-exposure to ozone. *Toxicology and applied pharmacology*. 1998;152(1):30-40.

Combination toxicology. Proceedings of a European conference. Veldhoven, The Netherlands, 11-13 October 1995. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 1996;34(11-12):1025-185.

Connaughton M, Rogers J, Connaughton VP. Can co-exposure with anti-oxidants mitigate the adverse effects of aflatoxin B1 on the visual system of developing zebrafish larvae. *Investigative Ophthalmology & Visual Science*. 2018;59(9).

Conolly RB. Biologically motivated quantitative models and the mixture toxicity problem. *Toxicological sciences : an official journal of the Society of Toxicology*. 2001;63(1):1-2.

Contardo-Jara V, Kuehn S, Pflugmacher S. Single and combined exposure to MC-LR and BMAA confirm suitability of *Aegagropila linnaei* for use in green liver systems()-A case study with cyanobacterial toxins. *Aquatic toxicology (Amsterdam, Netherlands)*. 2015;165:101-8.

Coors A, Dobrick J, Moder M, Kehrer A. Mixture toxicity of wood preservative products in the fish embryo toxicity test. *Environmental toxicology and chemistry*. 2012;31(6):1239-48.

Coors A, Vollmar P, Heim J, Sacher F, Kehrer A. Environmental risk assessment of biocidal products: identification of relevant components and reliability of a component-based mixture assessment. *Environmental Sciences Europe*. 2018;30.

Coors A, Vollmar P, Sacher F, Kehrer A. Is there synergistic interaction between fungicides inhibiting different enzymes in the ergosterol biosynthesis

pathway in toxicity tests with the green alga *Raphidocelis subcapitata*? *Ecotoxicology*. 2018;27(7):936-44.

Coors A, Vollmar P, Sacher F, Polleichtner C, Hassold E, Gildemeister D, et al. Prospective environmental risk assessment of mixtures in wastewater treatment plant effluents - Theoretical considerations and experimental verification. *Water Research*. 2018;140:56-66.

Correia K, Williams PL. A hierarchical modeling approach for assessing the safety of exposure to complex antiretroviral drug regimens during pregnancy. *Statistical Methods in Medical Research*. 2019;28(2):599-612.

Cosnier F, Nunge H, Bonfanti E, Grossmann S, Lambert-Xollin AM, Muller S, et al. Toluene and methylethylketone: effect of combined exposure on their metabolism in rat. *Xenobiotica*. 2018;48(7):684-94.

Cosnier F, Nunge H, Bonfanti E, Grossmann S, Lambert-Xollin A-M, Muller S, et al. Toluene and methylethylketone: effect of combined exposure on their metabolism in rat. *Xenobiotica*; the fate of foreign compounds in biological systems. 2018;48(7):684-94.

Costa L, Mohmood I, Trindade T, Anjum NA, Duarte AC, Pereira E. Phagocytic cell responses to silica-coated dithiocarbamate-functionalized iron oxide nanoparticles and mercury co-exposures in *Anguilla anguilla* L. *Environmental science and pollution research international*. 2016;23(12):12272-86.

Cowell WJ, Wright RJ. Sex-Specific Effects of Combined Exposure to Chemical and Non-chemical Stressors on Neuroendocrine Development: a Review of Recent Findings and Putative Mechanisms. *Current environmental health reports*. 2017;4(4):415-25.

Cremazy A, Brix KV, Wood CM. Chronic Toxicity of Binary Mixtures of Six Metals (Ag, Cd, Cu, Ni, Pb, and Zn) to the Great Pond Snail *Lymnaea stagnalis*. *Environmental Science & Technology*. 2018;52(10):5979-88.

Cremazy A, Brix KV, Wood CM. Using the Biotic Ligand Model framework to investigate binary metal interactions on the uptake of Ag, Cd, Cu, Ni, Pb and Zn in the freshwater snail *Lymnaea stagnalis*. *Science of the Total Environment*. 2019;647:1611-25.

Crepet A, Heraud F, Bechaux C, Gouze ME, Pierlot S, Fastier A, et al. The PERICLES research program: an integrated approach to characterize the combined effects of mixtures of pesticide residues to which the French population is exposed. *Toxicology*. 2013;313(2-3):83-93.

Crepet A, Vanacker M, Sprong C, de Boer W, Blaznik U, Kennedy M, et al. Selecting mixtures on the basis of dietary exposure and hazard data: application to pesticide exposure in the European population in relation to steatosis. *International Journal of Hygiene and Environmental Health*. 2019;222(2):291-306.

Cruse JP, Lewin MR, Ferulano GP, Clark CG. Co-carcinogenic effects of dietary cholesterol in experimental colon cancer. *Nature*. 1978;276(5690):822-5.

Cruse P, Lewin M, Clark CG. Dietary cholesterol is co-carcinogenic for human colon cancer. *Lancet (London, England)*. 1979;1(8119):752-5.

Cui X, Wan B, Guo L-H, Yang Y, Ren X. Insight into the Mechanisms of Combined Toxicity of Single-Walled Carbon Nanotubes and Nickel Ions in Macrophages: Role of P2X7 Receptor. *Environmental science & technology*. 2016;50(22):12473-83.

Cunha KS, Reguly ML, Gimmler-Luz MC, Santos JH, Lehmann M, de Andrade HH. Co-mutagenic effect of tannic acid on ring-X chromosome loss induced by mitomycin C in sperm cells of *Drosophila melanogaster*. *Mutation research*. 1994;308(2):143-8.

Cypher AD, Fetterman B, Bagatto B. Vascular parameters continue to decrease post-exposure with simultaneous, but not individual exposure to BPA and hypoxia in zebrafish larvae. *Comparative Biochemistry and Physiology C-Toxicology & Pharmacology*. 2018;206:11-6.

da Silva L, Yang ZC, Pires NMM, Dong T, Teien HC, Storebakken T, et al. Monitoring Aquaculture Water Quality: Design of an Early Warning Sensor with *Aliivibrio fischeri* and Predictive Models. *Sensors*. 2018;18(9).

Dal Santo G, Grotto A, Boligon AA, Da Costa B, Rambo CL, Fantini EA, et al. Protective effect of *Uncaria tomentosa* extract against oxidative stress and genotoxicity induced by glyphosate-Roundup (R) using zebrafish (*Danio rerio*) as a model. *Environmental Science and Pollution Research*. 2018;25(12):11703-15.

Dale NM, Wyatt RD, Fuller HL. Additive toxicity of aflatoxin and dietary tannins in broiler chicks. *Poultry science*. 1980;59(11):2417-20.

Dance C, Botias C, Goulson D. The combined effects of a monotonous diet and exposure to thiamethoxam on the performance of bumblebee micro-colonies. *Ecotoxicology and environmental safety*. 2017;139:194-201.

Dardenne F, Nobels I, De Coen W, Blust R. Mixture toxicity and gene inductions: can we predict the outcome? *Environmental toxicology and chemistry*. 2008;27(3):509-18.

Datta JK, Banerjee A, Sikdar MS, Gupta S, Mondal NK. Impact of combined exposure of chemical, fertilizer, bio-fertilizer and compost on growth, physiology and productivity of Brassica campestris in old alluvial soil. *Journal of environmental biology*. 2009;30(5 Suppl):797-800.

Davies HW, Vlaanderen JJ, Henderson SB, Brauer M. Correlation between co-exposures to noise and air pollution from traffic sources. *Occupational and environmental medicine*. 2009;66(5):347-50.

Davies K, Fisher K, Foley M, Greenaway A, Hewitt J, Le Heron R, et al. Navigating collaborative networks and cumulative effects for Sustainable Seas. *Environmental Science & Policy*. 2018;83:22-32.

Davis M, Li J, Knight E, Eldridge SR, Daniels KK, Bushel PR. Toxicogenomics profiling of bone marrow from rats treated with topotecan in combination with oxaliplatin: a mechanistic strategy to inform combination toxicity. *Frontiers in genetics*. 2015;6:14.

Davis SJ, Huallachain DO, Mellander PE, Kelly AM, Matthaei CD, Piggott JJ, et al. Multiple-stressor effects of sediment, phosphorus and nitrogen on stream macroinvertebrate communities. *Science of the Total Environment*. 2018;637:577-87.

Dawson DA, Allen EMG, Allen JL, Baumann HJ, Bensinger HM, Genco N, et al. Time-dependence in mixture toxicity prediction. *Toxicology*. 2014;326:153-63.

Dawson DA, Allen JL, Schultz TW, Poch G. Time-dependence in mixture toxicity with soft-electrophiles: 2. Effects of relative reactivity level on time-dependent toxicity and combined effects for selected Michael acceptors. *Journal of environmental science and health Part A, Toxic/hazardous substances & environmental engineering*. 2008;43(1):43-52.

Dawson DA, Genco N, Bensinger HM, Guinn D, Il'giovine ZJ, Wayne Schultz T, et al. Evaluation of an asymmetry parameter for curve-fitting in single-chemical and mixture toxicity assessment. *Toxicology*. 2012;292(2-3):156-61.

Dawson DA, Jeyaratnam J, Mooneyham T, Poch G, Schultz TW. Mixture toxicity of SN2-reactive soft electrophiles: 1. Evaluation of mixtures containing alpha-halogenated acetonitriles. *Archives of environmental contamination and toxicology*. 2010;59(4):532-41.

Dawson DA, Mooneyham T, Jeyaratnam J, Schultz TW, Poch G. Mixture toxicity of S(N)2-reactive soft electrophiles: 2-evaluation of mixtures containing

ethyl alpha-halogenated acetates. *Archives of environmental contamination and toxicology*. 2011;61(4):547-57.

Dawson DA, Poch G, Schultz TW. Chemical mixture toxicity testing with *Vibrio fischeri*: combined effects of binary mixtures for ten soft electrophiles. *Ecotoxicology and environmental safety*. 2006;65(2):171-80.

Dawson DA, Poch G, Schultz TW. Mixture toxicity of SN2-reactive soft electrophiles: 3. Evaluation of ethyl alpha-halogenated acetates with alpha-halogenated acetonitriles. *Archives of environmental contamination and toxicology*. 2014;66(2):248-58.

Dawson DA, Poch G. Evaluation of consistency for multiple experiments of a single combination in the time-dependence mixture toxicity assay. *Toxicology mechanisms and methods*. 2017;27(9):707-16.

Dawson DA, Wilke TS. Initial evaluation of developmental malformation as an end point in mixture toxicity hazard assessment for aquatic vertebrates. *Ecotoxicology and environmental safety*. 1991;21(2):215-26.

de Almeida ACG, Petersen K, Langford K, Thomas KV, Tollefsen KE. Mixture toxicity of five biocides with dissimilar modes of action on the growth and photosystem II efficiency of *Chlamydomonas reinhardtii*. *Journal of toxicology and environmental health Part A*. 2017;80(16-18):971-86.

de Angelis E, Runnstrom J. The effect of temporary treatment of animal half embryos with lithium and the modification of this effect by simultaneous exposure to actinomycin D. *Wilhelm Roux' Archiv fur Entwicklungsmechanik der Organismen*. 1970;164(3):236-46.

De Anna JS, Leggieri LR, Darraz LA, Carcamo JG, Venturino A, Luquet CM. Effects of sequential exposure to water accommodated fraction of crude oil and chlorpyrifos on molecular and biochemical biomarkers in rainbow trout. *Comparative Biochemistry and Physiology C-Toxicology & Pharmacology*. 2018;212:47-55.

de Figueiredo LP, Daam MA, Mainardi G, Marien J, Espindola ELG, van Gestel CAM, et al. The use of gene expression to unravel the single and mixture toxicity of abamectin and difenoconazole on survival and reproduction of the springtail *Folsomia candida*. *Environmental Pollution*. 2019;244:342-50.

De Grove KC, Provoost S, Braun H, Blomme EE, Teufelberger AR, Krysko O, et al. IL-33 signalling contributes to pollutant-induced allergic airway inflammation. *Clinical and Experimental Allergy*. 2018;48(12):1665-75.

de Haas EM, Reuvers B, Moermond CTA, Koelmans AA, Kraak MHS. Responses of benthic invertebrates to combined toxicant and food input in floodplain lake sediments. *Environmental toxicology and chemistry*. 2002;21(10):2165-71.

de Melo CB, Coa F, Alves OL, Martinez DST, Barbieri E. Co-exposure of graphene oxide with trace elements: Effects on acute ecotoxicity and routine metabolism in *Palaemon pandaliformis* (shrimp). *Chemosphere*. 2019;223:157-64.

de Mik G, Henderson PT, Bragt PC. Screening models in occupational health practice for assessment of combined exposure to chemicals at work. *International archives of occupational and environmental health*. 1988;Suppl:54-62.

de Moura EG, Portela SB, Macedo VRA, Sena VGL, Sousa CCM, Aguiar ADF. Gypsum and Legume Residue as a Strategy to Improve Soil Conditions in Sustainability of Agrosystems of the Humid Tropics. *Sustainability*. 2018;10(4).

de Oliveira J, Pacheco AR, Coutinho L, Oliveira H, Pinho S, Almeida L, et al. Combination of etoposide and fisetin results in anti-cancer efficiency against osteosarcoma cell models. *Archives of Toxicology*. 2018;92(3):1205-14.

de Oliveira LF, Cabral MT, Risso WE, Martinez CBD. Single and combined effects of Zn, Mn and Fe on the Neotropical freshwater bivalve *Anodontites trapesialis*: Bioaccumulation and biochemical biomarkers. *Ecotoxicology and Environmental Safety*. 2018;161:735-45.

de Perre C, Murphy TM, Lydy MJ. Mixture toxicity of phostebupirim and cyfluthrin: Species-specific responses. *Environmental toxicology and chemistry*. 2017;36(7):1947-54.

de Ruiter-Bootsma AL, Davids JA. Survival of spermatogonial stem cells in the CBA mouse after combined exposure to 1-MeV fission neutrons and hydroxyurea. *Radiation research*. 1981;85(1):38-46.

De Ruyck K, De Boevre M, Huybrechts I, De Saeger S. Dietary mycotoxins, co-exposure, and carcinogenesis in humans: Short review. *Mutation research Reviews in mutation research*. 2015;766:32-41.

de Souza ES, Texeira RA, da Costa HSC, Oliveira FJ, Melo LCA, do Carmo Freitas Faial K, et al. Assessment of risk to human health from simultaneous exposure to multiple contaminants in an artisanal gold mine in Serra Pelada, Para, Brazil. *The Science of the total environment*. 2017;576:683-95.

de The G. Co-carcinogenic events in herpesvirus oncogenesis: a review. IARC scientific publications. 1978(24 Pt 2):933-45.

De Valck J, Rolfe J. Comparing biodiversity valuation approaches for the sustainable management of the Great Barrier Reef, Australia. *Ecosystem Services*. 2019;35:23-31.

De Zwart D, Posthuma L. Complex mixture toxicity for single and multiple species: proposed methodologies. *Environmental toxicology and chemistry*. 2005;24(10):2665-76.

DeCourten BM, Brander SM. Combined effects of increased temperature and endocrine disrupting pollutants on sex determination, survival, and development across generations. *Scientific reports*. 2017;7(1):9310.

Dedova LN, Denisov LA. The treatment of apical periodontitis by using combined exposure to focal measured vacuum and local d'Arsonval treatment. *Stomatologiia*. 1991;70(1):26-7.

Dekker N, Bouma A, Daemen I, Vernooij H, van Leengoed L, Wagenaar JA, et al. Effect of Simultaneous Exposure of Pigs to *Streptococcus suis* Serotypes 2 and 9 on Their Colonization and Transmission, and on Mortality. *Pathogens* (Basel, Switzerland). 2017;6(4).

del Arco A, Parra G, de Vicente I. Going deeper into phosphorus adsorbents for lake restoration: Combined effects of magnetic particles, intraspecific competition and habitat heterogeneity pressure on *Daphnia magna*. *Ecotoxicology and Environmental Safety*. 2018;148:513-9.

del Arroyo OG, Silver WL. Disentangling the long-term effects of disturbance on soil biogeochemistry in a wet tropical forest ecosystem. *Global Change Biology*. 2018;24(4):1673-84.

Del Rio AM, Davis BE, Fangue NA, Todgham AE. Combined effects of warming and hypoxia on early life stage Chinook salmon physiology and development. *Conservation Physiology*. 2019;7.

Delijewski M, Wrzesniok D, Beberok A, Rok J, Otreba M, Buszman E. The effect of simultaneous exposure of HEMn-DP and HEMn-LP melanocytes to nicotine and UV-radiation on the cell viability and melanogenesis. *Environmental research*. 2016;151:44-9.

DeLorenzo ME, Serrano L. Individual and mixture toxicity of three pesticides; atrazine, chlorpyrifos, and chlorothalonil to the marine phytoplankton

species *Dunaliella tertiolecta*. Journal of environmental science and health Part B, Pesticides, food contaminants, and agricultural wastes. 2003;38(5):529-38.

DeLorenzo ME, Serrano L. Mixture toxicity of the antifouling compound irgarol to the marine phytoplankton species *Dunaliella tertiolecta*. Journal of environmental science and health Part B, Pesticides, food contaminants, and agricultural wastes. 2006;41(8):1349-60.

Delzeit R, Winkler M, Soder M. Land Use Change under Biofuel Policies and a Tax on Meat and Dairy Products: Considering Complexity in Agricultural Production Chains Matters. Sustainability. 2018;10(2).

Demirci O, Guven K, Asma D, Ogut S, Ugurlu P. Effects of endosulfan, thiamethoxam, and indoxacarb in combination with atrazine on multi-biomarkers in *Gammarus kischineffensis*. Ecotoxicology and Environmental Safety. 2018;147:749-58.

Deng QF, Dai XY, Feng W, Huang SL, Yuan Y, Xiao YM, et al. Co-exposure to metals and polycyclic aromatic hydrocarbons, microRNA expression, and early health damage in coke oven workers. Environment International. 2019;122:369-80.

Deng R, Lin D, Zhu L, Majumdar S, White JC, Gardea-Torresdey JL, et al. Nanoparticle interactions with co-existing contaminants: joint toxicity, bioaccumulation and risk. Nanotoxicology. 2017;11(5):591-612.

Deng R, Zhu Y, Hou J, White JC, Gardea-Torresdey JL, Lin DH. Antagonistic toxicity of carbon nanotubes and pentachlorophenol to *Escherichia coli*: Physiological and transcriptional responses. Carbon. 2019;145:658-67.

Dennison JE, Bigelow PL, Mumtaz MM, Andersen ME, Dobrev ID, Yang RSH. Evaluation of potential toxicity from co-exposure to three CNS depressants (toluene, ethylbenzene, and xylene) under resting and working conditions using PBPK modeling. Journal of occupational and environmental hygiene. 2005;2(3):127-35.

Deruytter D, Baert JM, Nevejan N, De Schamphelaere KAC, Janssen CR. Mixture toxicity in the marine environment: Model development and evidence for synergism at environmental concentrations. Environmental toxicology and chemistry. 2017;36(12):3471-9.

Deshevoi IB, Moroz BB, Sudakov KV, Iumatov EA, Salieva RM. Status of the hematopoietic system in rats exposed to the combined effects of chronic low-

dose radiation and emotional stress. *Biulleten' eksperimental'noi biologii i meditsiny*. 1995;119(4):349-53.

Deshpande D, Alffenaar JWC, Koser CU, Dheda K, Chapagain ML, Simbar N, et al. D-Cycloserine Pharmacokinetics/Pharmacodynamics, Susceptibility, and Dosing Implications in Multidrug-resistant Tuberculosis: A Faustian Deal. *Clinical Infectious Diseases*. 2018;67:S308-S16.

Desplats P, Patel P, Kosberg K, Mante M, Patrick C, Rockenstein E, et al. Combined exposure to Maneb and Paraquat alters transcriptional regulation of neurogenesis-related genes in mice models of Parkinson's disease. *Molecular neurodegeneration*. 2012;7:49.

Dever SM, Rodriguez M, Lapierre J, Costin BN, El-Hage N. Differing roles of autophagy in HIV-associated neurocognitive impairment and encephalitis with implications for morphine co-exposure. *Frontiers in microbiology*. 2015;6:653.

Dhawan M, Flora SJ, Singh S, Tandon SK. Chelation of lead during co-exposure to ethanol. *Biochemistry international*. 1989;19(5):1067-75.

Dhomse SS, Kinnison D, Chipperfield MP, Salawitch RJ, Cionni I, Hegglin MI, et al. Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. *Atmospheric Chemistry and Physics*. 2018;18(11):8409-38.

Di Poi C, Costil K, Bouchart V, Halm-Lemeille MP. Toxicity assessment of five emerging pollutants, alone and in binary or ternary mixtures, towards three aquatic organisms. *Environmental Science and Pollution Research*. 2018;25(7):6122-34.

Di Renzo F, Metruccio F, Battistoni M, Moretto A, Menegola E. Relative potency ranking of azoles altering craniofacial morphogenesis in rats: An in vitro data modelling approach. *Food and Chemical Toxicology*. 2019;123:553-60.

Diaz R, Lardies MA, Tapia FJ, Tarifeno E, Vargas CA. Transgenerational Effects of pCO₂-Driven Ocean Acidification on Adult Mussels *Mytilus chilensis* Modulate Physiological Response to Multiple Stressors in Larvae. *Frontiers in Physiology*. 2018;9.

Dickel F, Munch D, Amdam GV, Mappes J, Freitak D. Increased survival of honeybees in the laboratory after simultaneous exposure to low doses of pesticides and bacteria. *Plos One*. 2018;13(1).

Dickel F, Munch D, Amdam GV, Mappes J, Freitak D. Increased survival of honeybees in the laboratory after simultaneous exposure to low doses of pesticides and bacteria. *PloS one*. 2018;13(1):e0191256.

Dickel H, Blome O, Dickel B, Bruckner T, Stockfleth E, Soemantri SP. Occupational syncarcinogenesis in the skin - combined effects of two carcinogens from the German occupational disease list. *Journal der Deutschen Dermatologischen Gesellschaft = Journal of the German Society of Dermatology : JDDG*. 2016;14(12):1284-96.

Dienst M, Goebel L, Birk S, Kohn D. Bernese periacetabular osteotomy through a double approach: Simplification of a surgical technique. *Operative Orthopädie Und Traumatologie*. 2018;30(5):342-58.

Dietrich S, Ploessl F, Bracher F, Laforsch C. Single and combined toxicity of pharmaceuticals at environmentally relevant concentrations in *Daphnia magna*--a multigenerational study. *Chemosphere*. 2010;79(1):60-6.

Dimitrie DA, Sparling DW. Joint toxicity of chlorpyrifos and endosulfan to Pacific treefrog (*Pseudacris regilla*) tadpoles. *Archives of environmental contamination and toxicology*. 2014;67(3):444-52.

Ding A, Wang JL, Lin DC, Zeng R, Yu SP, Gan ZD, et al. Effects of GAC layer on the performance of gravity-driven membrane filtration (GDM) system for rainwater recycling. *Chemosphere*. 2018;191:253-61.

Ding K, Lu L, Wang J, Wang J, Zhou M, Zheng C, et al. In vitro and in silico investigations of the binary-mixture toxicity of phthalate esters and cadmium (II) to *Vibrio qinghaiensis* sp.-Q67. *The Science of the total environment*. 2017;580:1078-84.

Ding L, Zang L, Zhang Y, Zhang Y, Wang X, Ai W, et al. Joint toxicity of fluoroquinolone and tetracycline antibiotics to zebrafish (*Danio rerio*) based on biochemical biomarkers and histopathological observation. *The Journal of toxicological sciences*. 2017;42(3):267-80.

Ding SB, Yu LL, An BJ, Zhang GF, Yu PX, Wang Z. Combination effects of airborne particulate matter exposure and high-fat diet on hepatic fibrosis through regulating the ROS-endoplasmic reticulum stress-TGF beta/SMADs axis in mice. *Chemosphere*. 2018;199:538-45.

Ding T, Zhang J, Ni W, Li J. Combined toxicity of arsenite and dimethylarsenic acid on the freshwater diatom *Nitzschia palea*. *Ecotoxicology (London, England)*. 2017;26(2):202-10.

Dinman BD. ACUTE COMBINED TOXICITY DUE TO DDVP AND CHLORDANE. *Archives of environmental health*. 1964;9:765-9.

Diouf B, Djoneidi M, Niang A, Diallo S, Moreira-Diop T, Bao O. A case of joint toxicity from pefloxacin in the treatment of nephrotic syndrome in a child. *Dakar medical*. 1996;41(2):105-7.

Dirilgen N, Dogan F. Speciation of chromium in the presence of copper and zinc and their combined toxicity. *Ecotoxicology and environmental safety*. 2002;53(3):397-403.

Dmitriev AI, Istomina GN. Change in the physical endurance of rats in the late periods after combined exposure to external gamma irradiation and internal radioactive iodine contamination. *Radiobiologiya*. 1978;18(5):777-9.

Dobrzanska-Tatańczuch L, Starek A. Evaluation of combined toxic action of benzene and ethanol in the rat fetus. *Folia medica Cracoviensia*. 1991;32(3-4):257-73.

Dobrzynska MM, Gajewski AK. Induction of micronuclei in bone marrow and sperm head abnormalities after combined exposure of mice to low doses of X-rays and acrylamide. *Teratogenesis, carcinogenesis, and mutagenesis*. 2000;20(3):133-40.

Dobrzynska MM, Gajewski AK. Mouse dominant lethal and sperm abnormality studies with combined exposure to X-rays and mitomycin C. *Mutation research*. 1994;306(2):203-9.

Dobs YE, Ali MM. The epigenetic modulation of alcohol/ethanol and cannabis exposure/co-exposure during different stages. *Open Biology*. 2019;9(1).

Dolgikh OV, Zaitseva NV, Krivtsov AV, Gorshkova KG, Lanin DV, Bubnova OA, et al. Justifying genetic and immune markers of efficiency and sensitivity under combined exposure to risk factors in mining industry workers. *Meditina truda i promyshlennaia ekologiya*. 2014(12):19-23.

Dolgushin MV, Sosedova LM. Hydrolase and oxidoreductase activities in peripheral blood lymphocytes in combined exposure to biological allergens and sulfur dioxide. *Bulletin of experimental biology and medicine*. 2006;141(2):257-60.

Dong SS, Qu M, Rui Q, Wang DY. Combinational effect of titanium dioxide nanoparticles and nanopolystyrene particles at environmentally relevant concentrations on nematode *Caenorhabditis elegans*. *Ecotoxicology and Environmental Safety*. 2018;161:444-50.

Dong Y-Y, Lei B-L, Zhang C-B, Zhang F-J. Joint toxicity on multi-component mixtures of SDS and substituted aromatic compounds. *Huan jing ke xue= Huanjing kexue*. 2006;27(8):1643-6.

Dong ZJ, Sun TT. Combined effects of ocean acidification and temperature on planula larvae of the moon jellyfish *Aurelia coerulea*. *Marine Environmental Research*. 2018;139:144-50.

Donzelli G, Carducci A, Llopis-Gonzalez A, Verani M, Llopis-Morales A, Cioni L, et al. The Association between Lead and Attention-Deficit/Hyperactivity Disorder: A Systematic Review. *International Journal of Environmental Research and Public Health*. 2019;16(3).

Dorea JG. Co-exposure and confounders during neurodevelopment: we need them in the bigger picture of secondhand smoke exposure during pregnancy. *Environmental research*. 2011;111(8):1332-3.

Dorea JG. Multiple toxic heavy metals and neonatal neurobehavior in China require considering co-exposure to Thimerosal-ethylmercury and adjuvant-aluminum. *Neurotoxicology and teratology*. 2012;34(1):219.

Dorne J, Benford D, Ragas A, Posthuma L, Kass GE, Manini P, et al. Harmonised risk assessment for human health, animal health and ecological risk assessment of combined exposure to multiple chemicals: a food and feed safety perspective. *Toxicology Letters*. 2018;295:S37-S8.

Dorts J, Bauwin A, Kestemont P, Jolly S, Sanchez W, Silvestre F. Proteasome and antioxidant responses in *Cottus gobio* during a combined exposure to heat stress and cadmium. *Comparative biochemistry and physiology Toxicology & pharmacology : CBP*. 2012;155(2):318-24.

Douki T, Ksory Z, Marie C, Favier A, Ravanat J-L, Maitre A. Genotoxicity of combined exposure to polycyclic aromatic hydrocarbons and UVA--a mechanistic study. *Photochemistry and photobiology*. 2008;84(5):1133-40.

Drabkova M, Admiraal W, Marsalek B. Combined exposure to hydrogen peroxide and light--selective effects on cyanobacteria, green algae, and diatoms. *Environmental science & technology*. 2007;41(1):309-14.

Drummond D, Baravalle-Einaudi M, Lezmi G, Vibhushan S, Franco-Montoya M-L, Hadchouel A, et al. Combined Effects of in Utero and Adolescent Tobacco Smoke Exposure on Lung Function in C57Bl/6J Mice. *Environmental health perspectives*. 2017;125(3):392-9.

Du H, Zhu X, Fan C, Xu S, Wang Y, Zhou Y. Oxidative damage and OGG1 expression induced by a combined effect of titanium dioxide nanoparticles and lead acetate in human hepatocytes. *Environmental toxicology*. 2012;27(10):590-7.

Du J, Tang JH, Xu SD, Ge JY, Dong YW, Li HX, et al. Parental transfer of perfluorooctane sulfonate and ZnO nanoparticles chronic co-exposure and inhibition of growth in F1 offspring. *Regulatory Toxicology and Pharmacology*. 2018;98:41-9.

Duan J, Hu H, Li Q, Jiang L, Zou Y, Wang Y, et al. Combined toxicity of silica nanoparticles and methylmercury on cardiovascular system in zebrafish (*Danio rerio*) embryos. *Environmental toxicology and pharmacology*. 2016;44:120-7.

Duan J, Yu Y, Li Y, Wang Y, Sun Z. Inflammatory response and blood hypercoagulable state induced by low level co-exposure with silica nanoparticles and benzo a pyrene in zebrafish (*Danio rerio*) embryos. *Chemosphere*. 2016;151:152-62.

Duan JF, Kang J, Qin W, Deng T, Liu H, Li BZ, et al. Exposure to formaldehyde and diisononyl phthalate exacerbate neuroinflammation through NF-kappa B activation in a mouse asthma model. *Ecotoxicology and Environmental Safety*. 2018;163:356-64.

Duarte C, Navarro JM, Quijon PA, Loncon D, Torres R, Manriquez PH, et al. The energetic physiology of juvenile mussels, *Mytilus chilensis* (Hupe): The prevalent role of salinity under current and predicted pCO₂ scenarios. *Environmental Pollution*. 2018;242:156-63.

Duarte RM, Wood CM, Val AL, Smith DS. Physiological protective action of dissolved organic carbon on ion regulation and nitrogenous waste excretion of zebrafish (*Danio rerio*) exposed to low pH in ion-poor water. *Journal of Comparative Physiology B-Biochemical Systems and Environmental Physiology*. 2018;188(5):793-807.

Dubovicky M, Paton S, Morris M, Mach M, Lucot JB. Effects of combined exposure to pyridostigmine bromide and shaker stress on acoustic startle response, pre-pulse inhibition and open field behavior in mice. *Journal of applied toxicology : JAT*. 2007;27(3):276-83.

Dudka J, Szczepaniak S, Mazur M. Evaluation of the combined effect of lead and sodium nitrite on some blood biochemical parameters in blood of rats

during subchronic exposure. Influence on levels of methemoglobin, sulfhydryl groups and tryptophan. *Roczniki Panstwowego Zakladu Higieny*. 1997;48(1):23-9.

Dudka J, Szczepaniak S, Tomaszewska B. Evaluation of the combined effect of cupric chloride and sodium nitrite on selected biochemical parameters in rat plasma (subchronic exposure). *Roczniki Panstwowego Zakladu Higieny*. 1995;46(4):383-7.

Dudka J, Szczepaniak S. Evaluation of the combined effect of copper chloride and sodium nitrate on blood methemoglobin and tryptophan level in rats (subchronic exposure). *Roczniki Panstwowego Zakladu Higieny*. 1995;46(2):169-74.

Duman F, Koca FD. Single and combined effects of exposure concentration and duration on biological responses of *Ceratophyllum demersum* L. exposed to Cr species. *International journal of phytoremediation*. 2014;16(7-12):1192-208.

Dupont YL, Strandberg B, Damgaard C. Effects of herbicide and nitrogen fertilizer on non-target plant reproduction and indirect effects on pollination in *Tanacetum vulgare* (Asteraceae). *Agriculture Ecosystems & Environment*. 2018;262:76-82.

Dupraz V, Stachowski-Haberkorn S, Menard D, Limon G, Akcha F, Budzinski H, et al. Combined effects of antifouling biocides on the growth of three marine microalgal species. *Chemosphere*. 2018;209:801-14.

Duran-Reynals F. Studies on the combined effect of chemical carcinogens, hormones and virus infection. *Texas reports on biology and medicine*. 1957;15(3):754-77; discussion 77-81.

Duran-Reynals ML. COMBINED EFFECTS OF CHEMICAL CARCINOGENIC AGENTS AND VIRUSES. *Progress in experimental tumor research*. 1963;3:148-85.

Dutreux N, Notermans S, Gongora-Nieto MM, Barbosa-Canovas GV, Swanson BG. Effects of combined exposure of *micrococcus luteus* to nisin and pulsed electric fields. *International journal of food microbiology*. 2000;60(2-3):147-52.

Duvall MS, Wiberg PL, Kirwan ML. Controls on Sediment Suspension, Flux, and Marsh Deposition near a Bay-Marsh Boundary. *Estuaries and Coasts*. 2019;42(2):403-24.

Dwivedi N, Bhutia YD, Kumar V, Yadav P, Kushwaha P, Swarnkar H, et al. Effects of combined exposure to dichlorvos and monocrotophos on blood and brain

biochemical variables in rats. *Human & experimental toxicology*. 2010;29(2):121-9.

Dwivedi N, Flora G, Kushwaha P, Flora SJS. Alpha-lipoic acid protects oxidative stress, changes in cholinergic system and tissue histopathology during co-exposure to arsenic-dichlorvos in rats. *Environmental toxicology and pharmacology*. 2014;37(1):7-23.

Dzhambov AM, Dimitrova DD. Heart disease attributed to occupational noise, vibration and other co-exposure: Self-reported population-based survey among Bulgarian workers. *Medycyna pracy*. 2016;67(4):435-45.

Dzobo K, Hassen N, Senthebane DA, Thomford NE, Rowe A, Shipanga H, et al. Chemoresistance to Cancer Treatment: Benzo-alpha-Pyrene as Friend or Foe? *Molecules*. 2018;23(4).

Edwards AJ, Moon EY, Anderson D, McGregor DB. The effect of simultaneous exposure to bromodeoxyuridine and methyl methanesulphonate on sister-chromatid exchange frequency in cultured human lymphocytes. *Mutation research*. 1993;289(2):139-44.

Egea LG, Jimenez-Ramos R, Vergara JJ, Hernandez I, Brun FG. Interactive effect of temperature, acidification and ammonium enrichment on the seagrass *Cymodocea nodosa*. *Marine Pollution Bulletin*. 2018;134:14-26.

Egerer MH, Lin BB, Threlfall CG, Kendal D. Temperature variability influences urban garden plant richness and gardener water use behavior, but not planting decisions. *Science of the Total Environment*. 2019;646:111-20.

Eichler T, Ma Q, Kelly C, Mishra J, Parikh S, Ransom RF, et al. Single and combination toxic metal exposures induce apoptosis in cultured murine podocytes exclusively via the extrinsic caspase 8 pathway. *Toxicological sciences : an official journal of the Society of Toxicology*. 2006;90(2):392-9.

Eichler TE, Ransom RF, Smoyer WE. Differential induction of podocyte heat shock proteins by prolonged single and combination toxic metal exposure. *Toxicological sciences : an official journal of the Society of Toxicology*. 2005;84(1):120-8.

el Dirdiri NI, Barakat SE, Adam SE. The combined toxicity of *Aristolochia bracteata* and *Cadaba rotundifolia* to goats. *Veterinary and human toxicology*. 1987;29(2):133-7.

El Safty AMK, Samir AM, Mekkawy MK, Fouad MM. Genotoxic Effects Due to Exposure to Chromium and Nickel Among Electroplating Workers. *International Journal of Toxicology*. 2018;37(3):234-40.

Elkina NI, Maksutova AI. Alkaline phosphatase and transaminase activity in the liver and blood serum of rats in the late periods following combined exposure to external gamma radiation and alpha radiation from plutonium-239. *Radiobiologia*. 1986;26(6):838-42.

Elliott SM, Brigham ME, Kiesling RL, Schoenfuss HL, Jorgenson ZG. Environmentally Relevant Chemical Mixtures of Concern in Waters of United States Tributaries to the Great Lakes. *Integrated Environmental Assessment and Management*. 2018;14(4):509-18.

el-Masri HA, Tessari JD, Yang RS. Exploration of an interaction threshold for the joint toxicity of trichloroethylene and 1,1-dichloroethylene: utilization of a PBPK model. *Archives of toxicology*. 1996;70(9):527-39.

El-Nahhal Y, Lubbad R. Acute and single repeated dose effects of low concentrations of chlorpyrifos, diuron, and their combination on chicken. *Environmental Science and Pollution Research*. 2018;25(11):10837-47.

El-Nekeety AA, El-Kady AA, Abdel-Wahhab KG, Hassan NS, Abdel-Wahhab MA. Reduction of individual or combined toxicity of fumonisin B1 and zearalenone via dietary inclusion of organo-modified nano-montmorillonite in rats. *Environmental science and pollution research international*. 2017;24(25):20770-83.

Elovaara E, Collan Y, Pfaffli P, Vainio H. The combined toxicity of technical grade xylene and ethanol in the rat. *Xenobiotica; the fate of foreign compounds in biological systems*. 1980;10(6):435-45.

Elsheikha HM, Hussein HS, Rahbar MH. Clinico-pathological effects of *Schistosoma mansoni* infection associated with simultaneous exposure to malathion in Swiss outbred albino mice. *Acta tropica*. 2008;108(1):11-9.

Elsner P. Protection from combination exposure. *Current problems in dermatology*. 2007;34:111-9.

Emelogu ES, Pollard P, Dymond P, Robinson CD, Webster L, McKenzie C, et al. Occurrence and potential combined toxicity of dissolved organic contaminants in the Forth estuary and Firth of Forth, Scotland assessed using passive samplers and an algal toxicity test. *The Science of the total environment*. 2013;461-462:230-9.

Engel A, Bonisch H, Ostermoller J, Chipperfield MP, Dhomse S, Jockel P. A refined method for calculating equivalent effective stratospheric chlorine. *Atmospheric Chemistry and Physics*. 2018;18(2):601-19.

Engel DC, Slemmer JE, Vlug AS, Maas AIR, Weber JT. Combined effects of mechanical and ischemic injury to cortical cells: secondary ischemia increases damage and decreases effects of neuroprotective agents. *Neuropharmacology*. 2005;49(7):985-95.

Engstrom K, Riihimaki V, Laine A. Urinary disposition of ethylbenzene and m-xylene in man following separate and combined exposure. *International archives of occupational and environmental health*. 1984;54(4):355-63.

Erickson RJ, Ankley GT, DeFoe DL, Kosian PA, Makynen EA. Additive toxicity of binary mixtures of phototoxic polycyclic aromatic hydrocarbons to the oligochaete *Lumbriculus variegatus*. *Toxicology and applied pharmacology*. 1999;154(1):97-105.

Erickson RJ, Mount DR, Highland TL, Hockett JR, Hoff DJ, Jenson CT, et al. The Acute Toxicity of Major Ion Salts to *Ceriodaphnia dubia*. III. Mathematical Models for Mixture Toxicity. *Environmental Toxicology and Chemistry*. 2018;37(1):247-59.

Ernststoff A, Niero M, Muncke J, Trier X, Rosenbaum RK, Hauschild M, et al. Challenges of including human exposure to chemicals in food packaging as a new exposure pathway in life cycle impact assessment. *International Journal of Life Cycle Assessment*. 2019;24(3):543-52.

Ertl NG, O'Connor WA, Brooks P, Keats M, Elizur A. Combined exposure to pyrene and fluoranthene and their molecular effects on the Sydney rock oyster, *Saccostrea glomerata*. *Aquatic toxicology* (Amsterdam, Netherlands). 2016;177:136-45.

Escher BI, Ait-Aissa S, Behnisch PA, Brack W, Brion F, Brouwer A, et al. Effect-based trigger values for in vitro and in vivo bioassays performed on surface water extracts supporting the environmental quality standards (EQS) of the European Water Framework Directive. *Science of the Total Environment*. 2018;628-629:748-65.

Escher BI, Bramaz N, Lienert J, Neuwoehner J, Straub JO. Mixture toxicity of the antiviral drug Tamiflu((R)) (oseltamivir ethylester) and its active metabolite oseltamivir acid. *Aquatic toxicology* (Amsterdam, Netherlands). 2010;96(3):194-202.

Escher BI, Neale PA, Villeneuve DL. The advantages of linear concentration-response curves for in vitro bioassays with environmental samples. *Environmental Toxicology and Chemistry*. 2018;37(9):2273-80.

Escobar-Paramo P, Gougat-Barbera C, Hochberg ME. Evolutionary dynamics of separate and combined exposure of *Pseudomonas fluorescens* SBW25 to antibiotics and bacteriophage. *Evolutionary applications*. 2012;5(6):583-92.

Espitia-Perez P, Albino SM, da Rosa HT, Silveira AK, Espitia-Perez L, Brango H, et al. Effects of methylmercury and retinol palmitate co-administration in rats during pregnancy and breastfeeding: Metabolic and redox parameters in dams and their offspring. *Ecotoxicology and Environmental Safety*. 2018;162:603-15.

Espitia-Perez P, Albino SM, Espitia-Perez L, Brango H, da Rosa H, Silveira AK, et al. Neurobehavioral and oxidative stress alterations following methylmercury and retinyl palmitate co-administration in pregnant and lactating rats and their offspring. *Neurotoxicology*. 2018;69:164-80.

Estrada-Capetillo BL, Ortiz-Perez MD, Salgado-Bustamante M, Calderon-Aranda E, Rodriguez-Pinal CJ, Reynaga-Hernandez E, et al. Arsenic and fluoride co-exposure affects the expression of apoptotic and inflammatory genes and proteins in mononuclear cells from children. *Mutation research Genetic toxicology and environmental mutagenesis*. 2014;761:27-34.

Evans FJ, Kinghorn AD. Proceedings: A screening procedure for Euphorbia co-carcinogenic irritants. *The Journal of pharmacy and pharmacology*. 1973;25:Suppl:145P-6.

Evseeva TI, Geras'kin SA. Mechanism of induction of cytogenetic damage in plant meristematic cells caused by combined effect of heavy natural radionuclides and heavy and alkaline metals. *Radiatsionnaia biologii, radioecologii*. 2003;43(4):470-5.

Evstaf'eva NI, Demin IM, Sheina NI, Kurnaeva VP, Kolbeneva LI. Morphofunctional changes in the main components of the endocrine system after combined exposure to noise and trichloroethylene. *Gigiena truda i professional'nye zabolevaniia*. 1986(11):15-9.

Evstratova ES. Quantitative description of mammalian cell recovery after combined exposure to ionizing radiation with chemical agents. *Radiatsionnaia biologii, radioecologii*. 2012;52(3):268-75.

Eze UA, Huntriss J, Routledge MN, Gong YY. Toxicological effects of regulated mycotoxins and persistent organochloride pesticides: In vitro cytotoxic assessment of single and defined mixtures on MA-10 murine Leydig cell line. *Toxicology in Vitro*. 2018;48:93-103.

Ezechias M, Cajthaml T. New insight into isobolographic analysis for combinations of a full and partial agonist: Curved isoboles. *Toxicology*. 2018;402:9-16.

Ezechias M, Cajthaml T. Receptor partial agonism and method to express receptor partial activation with respect to novel Full Logistic Model of mixture toxicology. *Toxicology*. 2018;393:26-33.

Fabiani F, Cagnoni M, Fantini F. Morpho-functional changes in the hypothalamic nuclei following various stimuli. II. Effect of simultaneous exposure to cold stress and water overload on the morphology of the hypothalamic nuclei in the white rat. *Rassegna di neurologia vegetativa*. 1959;14:410-6.

Fadeeva VK, Melesova LM, Sidorova MV, Vikhrova EM, Kustov VV. Effect of isolated and combined exposure to phenol and elevated air temperature on the white blood cells. *Gigiena i sanitariia*. 1986(6):11-3.

Fadhlaoui M, Couture P. Combined effects of temperature and metal exposure on the fatty acid composition of cell membranes, antioxidant enzyme activities and lipid peroxidation in yellow perch (*Perca flavescens*). *Aquatic toxicology (Amsterdam, Netherlands)*. 2016;180:45-55.

Fahrig R. Anti-mutagenic agents are also co-recombinogenic and co-mutagenic agents are also anti-recombinogenic. *Mutation research*. 1995;326(2):245-6.

Fahrig R. Antimutagenic effects of tumor promoters--co-mutagenic effects of co-carcinogens. *Basic life sciences*. 1990;52:385-8.

Fahrig R. Anti-recombinogenic and convertible co-mutagenic effects of (E)-5-(2-bromovinyl)-2'-deoxyuridine (BVDU) and other 5-substituted pyrimidine nucleoside analogs in *S. cerevisiae* MP1. *Mutation research*. 1996;372(1):133-9.

Falasco E, Piano E, Doretto A, Fenoglio S, Bona F. Lentification in Alpine rivers: patterns of diatom assemblages and functional traits. *Aquatic Sciences*. 2018;80(4).

Falfushynska HI, Gnatyshyna LL, Ivanina AV, Khoma VV, Stoliar OB, Sokolova IM. Bioenergetic responses of freshwater mussels *Unio tumidus* to the

combined effects of nano-ZnO and temperature regime. *Science of the Total Environment*. 2019;650:1440-50.

Falk SA. Combined effects of noise and ototoxic drugs. *Environmental health perspectives*. 1972;2:5-22.

Falone S, Santini S, Cordone V, Di Emidio G, Tatone C, Cacchio M, et al. Extremely Low-Frequency Magnetic Fields and Redox-Responsive Pathways Linked to Cancer Drug Resistance: Insights from Co-Exposure-Based In Vitro Studies. *Frontiers in Public Health*. 2018;6.

Falone S, Santini S, Jr., Cordone V, Di Emidio G, Tatone C, Cacchio M, et al. Extremely Low-Frequency Magnetic Fields and Redox-Responsive Pathways Linked to Cancer Drug Resistance: Insights from Co-Exposure-Based In Vitro Studies. *Frontiers in public health*. 2018;6:33.

Fan G, Zhou F, Feng C. Toxic effects of combined exposure to four heavy metals at low doses. *Journal of hazardous materials*. 2017;323(Pt B):737-8.

Fan JX, Chen DY, Li NJ, Xu QF, Li H, He JH, et al. Adsorption and biodegradation of dye in wastewater with Fe₃O₄@MIL-100 (Fe) core-shell bio-nanocomposites. *Chemosphere*. 2018;191:315-23.

Fang H, Cui YB, Wang Z, Wang S. Toxicological assessment of multi-walled carbon nanotubes combined with nonylphenol in male mice. *Plos One*. 2018;13(7).

Fang S, Wang D, Zhang X, Long X, Qin M, Lin Z, et al. Similarities and differences in combined toxicity of sulfonamides and other antibiotics towards bacteria for environmental risk assessment. *Environmental monitoring and assessment*. 2016;188(7):429.

Fang Y, Yang H, Liu B, Zhang L. Transcriptional response of lysozyme, metallothionein, and superoxide dismutase to combined exposure to heavy metals and bacteria in *Macrura veneriformis*. *Comparative biochemistry and physiology Toxicology & pharmacology : CBP*. 2013;157(1):54-62.

Farraj AK, Boykin E, Ledbetter A, Andrews D, Gavett SH. Increased lung resistance after diesel particulate and ozone co-exposure not associated with enhanced lung inflammation in allergic mice. *Inhalation toxicology*. 2010;22(1):33-41.

Farraj AK, Walsh L, Haykal-Coates N, Malik F, McGee J, Winsett D, et al. Cardiac effects of seasonal ambient particulate matter and ozone co-exposure in rats. *Particle and fibre toxicology*. 2015;12:12.

Farzana S, Tam NFY. A combined effect of polybrominated diphenyl ether and aquaculture effluent on growth and antioxidative response of mangrove plants. *Chemosphere*. 2018;201:483-91.

Fatehifar M, Borghei SM, Nia AE. Application of moving bed biofilm reactor in the removal of pharmaceutical compounds (diclofenac and ibuprofen). *Journal of Environmental Chemical Engineering*. 2018;6(4):5530-5.

Fathi M, Binkowski LJ, Azadi NA, Hamesadeghi U, Mansouri B. Co-exposure effects of mercury chloride (HgCl₂) and silver nanoparticles (Ag-NPs) on goldfish (*Carassius auratus*): Histopathological changes, oxidative stress response, and bioaccumulation. *Desalination and Water Treatment*. 2018;105:264-72.

Faust DR, Kroger R, Moore MT, Rush SA. Management Practices Used in Agricultural Drainage Ditches to Reduce Gulf of Mexico Hypoxia. *Bulletin of Environmental Contamination and Toxicology*. 2018;100(1):32-40.

Fay PA, Aspinwall MJ, Collins HP, Gibson AE, Gill R, Jackson RB, et al. Flowering in grassland predicted by CO₂ and resource effects on species aboveground biomass. *Global Change Biology*. 2018;24(4):1771-81.

Fayaz S, Karimmirza M, Tanhaei S, Fathi M, Torbati PM, Fard-Esfahani P. Increased risk of differentiated thyroid carcinoma with combined effects of homologous recombination repair gene polymorphisms in an Iranian population. *Asian Pacific journal of cancer prevention : APJCP*. 2014;14(11):6727-31.

Fazakas Z, Lengyel Z, Nagymajtenyi L. Combined effects of subchronic exposure to lead, mercury and alcohol on the spontaneous and evoked cortical activity in rats. *Arhiv za higijenu rada i toksikologiju*. 2005;56(3):249-56.

Fedorenko VI. Use of orthogonal plans for the experimental analysis of the combined effects of harmful substances. *Gigiena i sanitariia*. 1986(11):54-7.

Fedorov VI. Disorders developing under combined exposure to ionizing radiation and stress. *Patologicheskaiia fiziologiia i eksperimental'naia terapiia*. 1997(1):31-3.

Feng JF, Gao YF, Ji YJ, Zhu L. Quantifying the interactions among metal mixtures in toxicodynamic process with generalized linear model. *Journal of Hazardous Materials*. 2018;345:97-106.

Feng L, Yang X, Asweto CO, Wu J, Zhang Y, Hu H, et al. Low-dose combined exposure of nanoparticles and heavy metal compared with PM_{2.5} in

human myocardial AC16 cells. *Environmental science and pollution research international*. 2017.

Feng L, Yang XZ, Shi YF, Liang S, Zhao T, Duan JC, et al. Co-exposure subacute toxicity of silica nanoparticles and lead acetate on cardiovascular system. *International Journal of Nanomedicine*. 2018;13:7819-34.

Feng M, He Q, Meng L, Zhang X, Sun P, Wang Z. Evaluation of single and joint toxicity of perfluorooctane sulfonate, perfluorooctanoic acid, and copper to *Carassius auratus* using oxidative stress biomarkers. *Aquatic toxicology* (Amsterdam, Netherlands). 2015;161:108-16.

Feng M, Yin H, Peng H, Lu GN, Liu ZH, Dang Z. iTRAQ-based proteomic profiling of *Pycnopus sanguineus* in response to co-existed tetrabromobisphenol A (TBBPA) and hexavalent chromium. *Environmental Pollution*. 2018;242:1758-67.

Feng XL, Ma FS, Zhao HJ, Liu G, Guo J. Gas Multiple Flow Mechanisms and Apparent Permeability Evaluation in Shale Reservoirs. *Sustainability*. 2019;11(7).

Feng YJ, Yang QQ, Tong XH, Wang JF, Chen SR, Lei ZK, et al. Long-Term Regional Environmental Risk Assessment and Future Scenario Projection at Ningbo, China Coupling the Impact of Sea Level Rise. *Sustainability*. 2019;11(6).

Feng YK, Wang WL, Wang YC, Sun J, Zhang C, Shahzad Q, et al. Experimental study of destruction of acetone in exhaust gas using microwave-induced metal discharge. *Science of the Total Environment*. 2018;645:788-95.

Feola DJ, Garvy BA. Combination exposure to zidovudine plus sulfamethoxazole-trimethoprim diminishes B-lymphocyte immune responses to *Pneumocystis murina* infection in healthy mice. *Clinical and vaccine immunology : CVI*. 2006;13(2):193-201.

Fernandez MC, Drouin S, Samoilenko M, Morel S, Krajinovic M, Laverdiere C, et al. A Bayesian multivariate latent t-regression model for assessing the association between corticosteroid and cranial radiation exposures and cardiometabolic complications in survivors of childhood acute lymphoblastic leukemia: a PETALE study. *Bmc Medical Research Methodology*. 2019;19.

Fernandez N, Beiras R. Combined toxicity of dissolved mercury with copper, lead and cadmium on embryogenesis and early larval growth of the *Paracentrotus lividus* sea-urchin. *Ecotoxicology* (London, England). 2001;10(5):263-71.

Ferner J, Schmidtlein S, Guuroh RT, Lopatin J, Linstadter AA. Disentangling effects of climate and land-use change on West African drylands' forage supply. *Global Environmental Change-Human and Policy Dimensions*. 2018;53:24-38.

Ferre DM, Quero AAM, Hernandez AF, Hynes V, Tornello MJ, Luders C, et al. Potential risks of dietary exposure to chlorpyrifos and cypermethrin from their use in fruit/vegetable crops and beef cattle productions. *Environmental Monitoring and Assessment*. 2018;190(5).

Ferreira JLR, Lonne MN, Franca TA, Maximilla NR, Lugokenski TH, Costa PG, et al. Co-exposure of the organic nanomaterial fullerene C₆₀ with benzo a pyrene in Danio rerio (zebrafish) hepatocytes: evidence of toxicological interactions. *Aquatic toxicology (Amsterdam, Netherlands)*. 2014;147:76-83.

Ficheux AS, Sibiril Y, Parent-Massin D. Co-exposure of Fusarium mycotoxins: in vitro myelotoxicity assessment on human hematopoietic progenitors. *Toxicon : official journal of the International Society on Toxinology*. 2012;60(6):1171-9.

Fifield LS. Simultaneous Thermal and Gamma Radiation Aging of Electrical Cable Polymers. In: Jackson JH, Paraventi D, Wright M, editors. *Proceedings of the 18th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, Vol 2. Minerals Metals & Materials Series* 2018. p. 3-10.

Figueroa D, Asaduzzaman M, Young F. Real time monitoring and quantification of reactive oxygen species in breast cancer cell line MCF-7 by 2',7'-dichlorofluorescein diacetate (DCFDA) assay. *Journal of Pharmacological and Toxicological Methods*. 2018;94:26-33.

Filippova LG, Buldakov LA, Nifatov AP. Carcinogenic effects of combined exposure to ²⁴¹Am and gamma-radiation. *Radiobiologia*. 1984;24(5):675-8.

Finch SC, Boundy MJ, Harwood DT. The Acute Toxicity of Tetrodotoxin and Tetrodotoxin-Saxitoxin Mixtures to Mice by Various Routes of Administration. *Toxins*. 2018;10(11).

Fischer C, Fredriksson A, Eriksson P. Neonatal co-exposure to low doses of an ortho-PCB (PCB 153) and methyl mercury exacerbate defective developmental neurobehavior in mice. *Toxicology*. 2008;244(2-3):157-65.

Fischer JM, Robbins SB, Al-Zoughool M, Kannamkumarath SS, Stringer SL, Larson JS, et al. Co-mutagenic activity of arsenic and benzo a pyrene in mouse skin. *Mutation research*. 2005;588(1):35-46.

Fisher PA, Lester BM, DeGarmo DS, Lagasse LL, Lin H, Shankaran S, et al. The combined effects of prenatal drug exposure and early adversity on neurobehavioral disinhibition in childhood and adolescence. *Development and psychopathology*. 2011;23(3):777-88.

Fitton JM, Hansom JD, Rennie AF. A method for modelling coastal erosion risk: the example of Scotland. *Natural Hazards*. 2018;91(3):931-61.

Flaks A, Hamilton JM, Clayson DB, Burch PR. The combined effect of radiation and chemical carcinogens in female A X IF mice. *British journal of cancer*. 1973;28(3):227-31.

Flint MS, Hood BL, Sun M, Stewart NA, Jones-Laughner J, Conrads TP. Proteomic analysis of the murine liver in response to a combined exposure to psychological stress and 7,12-dimethylbenz(a)anthracene. *Journal of proteome research*. 2010;9(1):509-20.

Flodgren P, Sjogren HO. Influence in vitro on NK and K cell activities by cimetidine and indomethacin with and without simultaneous exposure to interferon. *Cancer immunology, immunotherapy : CII*. 1985;19(1):28-34.

Flood S, Burkholder J, Cope G. Assessment of atrazine toxicity to the estuarine phytoplankter, *Dunaliella tertiolecta* (Chlorophyta), under varying nutrient conditions. *Environmental Science and Pollution Research*. 2018;25(12):11409-23.

Flora SJ, Dhawan M, Tandon SK. Effects of combined exposure to aluminium and ethanol on aluminium body burden and some neuronal, hepatic and haematopoietic biochemical variables in the rat. *Human & experimental toxicology*. 1991;10(1):45-8.

Flora SJ, Kumar D, Sachan SR, Das Gupta S. Combined exposure to lead and ethanol on tissue concentration of essential metals and some biochemical indices in rat. *Biological trace element research*. 1991;28(2):157-64.

Flora SJ, Tandon SK. Effect of combined exposure to cadmium and ethanol on regional brain biogenic amine levels in the rat. *Biochemistry international*. 1987;15(4):863-71.

Flora SJ, Tandon SK. Effect of combined exposure to lead and ethanol on some biochemical indices in the rat. *Biochemical pharmacology*. 1987;36(4):537-41.

Flora SJS, Gautam P, Kushwaha P. Lead and ethanol co-exposure lead to blood oxidative stress and subsequent neuronal apoptosis in rats. *Alcohol and alcoholism (Oxford, Oxfordshire)*. 2012;47(2):92-101.

Flora SJS, Mittal M, Mishra D. Co-exposure to arsenic and fluoride on oxidative stress, glutathione linked enzymes, biogenic amines and DNA damage in mouse brain. *Journal of the neurological sciences*. 2009;285(1-2):198-205.

Florek E, Ignatowicz E, Nowakowska A, Piekoszewski W, Kulza M, Saija A, et al. Effect of combined exposure to ethanol and tobacco smoke on lipid peroxidation in rats. *Przegląd lekarski*. 2009;66(10):655-9.

Folmer DE, Doell DL, Lee HS, Noonan GO, Carberry SE. A US population dietary exposure assessment for 4-methylimidazole (4-MEI) from foods containing caramel colour and from formation of 4-MEI through the thermal treatment of food. *Food Additives and Contaminants Part a-Chemistry Analysis Control Exposure & Risk Assessment*. 2018;35(10):1890-910.

Folzenlogen D. A case of atorvastatin combined toxic myopathy and inflammatory myositis. *Journal of clinical rheumatology : practical reports on rheumatic & musculoskeletal diseases*. 2001;7(5):340-5.

Formicki G, Stawarz R, Lukac N, Putala A, Kuczkowska A. Combined effects of cadmium and ultraviolet radiation on mortality and mineral content in common frog (*Rana temporaria*) larvae. *Journal of environmental science and health Part A, Toxic/hazardous substances & environmental engineering*. 2008;43(10):1174-83.

Fornaroli R, Ippolito A, Tolkkinen MJ, Mykra H, Muotka T, Balistrieri LS, et al. Disentangling the effects of low pH and metal mixture toxicity on macroinvertebrate diversity. *Environmental pollution (Barking, Essex : 1987)*. 2018;235:889-98.

Fornaroli R, Ippolito A, Tolkkinen MJ, Mykra H, Muotka T, Balistrieri LS, et al. Disentangling the effects of low pH and metal mixture toxicity on macroinvertebrate diversity. *Environmental Pollution*. 2018;235:889-98.

Forrence E, Covinsky JO, Mullen C. A seizure induced by concurrent lidocaine-tocainide therapy--is it just a case of additive toxicity? *Drug intelligence & clinical pharmacy*. 1986;20(1):56-9.

Frankel J, Wilen J, Mild KH. Assessing exposures to Magnetic resonance imaging's complex Mixture of Magnetic Fields for In Vivo, In Vitro, and epidemiologic studies of Health effects for staff and Patients. *Frontiers in Public Health*. 2018;6.

Frappier-Davignon L, Jegier S, Drouin C, Marier J, Roy LP, Tourangeau FJ. Combined effect of air pollution, occupational exposure and tobacco habits in obstructive lung diseases. I. Methodology. *L'union medicale du Canada*. 1973;102(7):1537-41.

Frappier-Davignon L, Saint-Pierre J. Combined effect of atmospheric pollution, occupational exposure, and tobacco habits in obstructive lung diseases. 3. Effects of occupational exposure. *L'union medicale du Canada*. 1975;104(5):755-62.

Frappier-Davignon L, St-Pierre J. Combined effect of air pollution, occupational exposure, and tobacco habits in obstructive lung diseases. II. Food processing firm: no occupational exposure. *L'union medicale du Canada*. 1973;102(7):1542-6.

Freidig A, Hofhuis M, Van Holstijn I, Hermens J. Glutathione depletion in rat hepatocytes: a mixture toxicity study with alpha, beta-unsaturated esters. *Xenobiotica; the fate of foreign compounds in biological systems*. 2001;31(5):295-307.

Freire C, Amaya E, Gil F, Fernandez MF, Murcia M, Llop S, et al. Prenatal co-exposure to neurotoxic metals and neurodevelopment in preschool children: The Environment and Childhood (INMA) Project. *Science of the Total Environment*. 2018;621:340-51.

Freire C, Amaya E, Gil F, Fernandez MF, Murcia M, Llop S, et al. Prenatal co-exposure to neurotoxic metals and neurodevelopment in preschool children: The Environment and Childhood (INMA) Project. *The Science of the total environment*. 2018;621:340-51.

Freitas EC, Rocha O, Espindola ELG. Effects of florfenicol and oxytetracycline on the tropical cladoceran *Ceriodaphnia silvestrii*: A mixture toxicity approach to predict the potential risks of antimicrobials for zooplankton. *Ecotoxicology and Environmental Safety*. 2018;162:663-72.

Freixa A, Acuna V, Gutierrez M, Sanchis J, Santos L, Rodriguez-Mozaz S, et al. Fullerenes Influence the Toxicity of Organic Micro-Contaminants to River Biofilms. *Frontiers in Microbiology*. 2018;9.

Freundt KJ, Romer KG, Federsel RJ. Decrease of inhaled toluene, ethyl benzene, m-xylene, or mesitylene in rat blood after combined exposure to ethyl acetate. *Bulletin of environmental contamination and toxicology*. 1989;42(4):495-8.

Friedenreich CM, McTiernan A. Combining Variables for Cancer Risk Estimation: Is the Sum Better than the Parts? *Cancer Prevention Research*. 2018;11(6):313-5.

Frizzi F, Bartalesi V, Santini G. Combined effects of temperature and interspecific competition on the mortality of the invasive garden ant, *Lasius neglectus*: A laboratory study. *Journal of thermal biology*. 2017;65:76-81.

Fu H, Yuan GX, Lou Q, Dai TT, Xu J, Cao T, et al. Functional traits mediated cascading effects of water depth and light availability on temporal stability of a macrophyte species. *Ecological Indicators*. 2018;89:168-74.

Fuente A, Qiu W, Zhang MB, Xie HW, Kardous CA, Campo P, et al. Use of the kurtosis statistic in an evaluation of the effects of noise and solvent exposures on the hearing thresholds of workers: An exploratory study. *Journal of the Acoustical Society of America*. 2018;143(3):1704-10.

Fujiwara Y, Watanabe S, Sakamoto M, Kaji T. Repair of wounded monolayers of cultured vascular endothelial cells after simultaneous exposure to lead and zinc. *Toxicology letters*. 1998;94(3):181-8.

Fukazawa H, Matsushita H, Terao Y. Identification of co-mutagenic chlorinated harmans in final effluent from a sewage treatment plant. *Mutation research*. 2001;491(1-2):65-70.

Fukunaga M, Yielding KL. Co-mutagenic effects of propidium on petite induction by ethidium in *Saccharomyces cerevisiae*. *Mutation research*. 1980;69(1):43-50.

Fukushima S, Inoue T, Uwagawa S, Shibata MA, Ito N. Co-carcinogenic effects of NaHCO₃ on o-phenylphenol-induced rat bladder carcinogenesis. *Carcinogenesis*. 1989;10(9):1635-40.

Fullman N, Yearwood J, Abay SM, Abbafati C, Abd-Allah F, Abdela J, et al. Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. *Lancet*. 2018;391(10136):2236-71.

Furusawa Y, Aoki M, Durante M. Simultaneous exposure of mammalian cells to heavy ions and X-rays. *Advances in space research : the official journal of the Committee on Space Research (COSPAR)*. 2002;30(4):877-84.

Gabelova A, Polakova V, Prochazka G, Kretova M, Poloncova K, Regendova E, et al. Sustained induction of cytochrome P4501A1 in human hepatoma cells by co-exposure to benzo a pyrene and 7H-dibenzo c,g carbazole underlies the synergistic effects on DNA adduct formation. *Toxicology and applied pharmacology*. 2013;271(1):1-12.

Gagan EM, Hull MW, Schultz TW, Poch G, Dawson DA. Time dependence in mixture toxicity with soft electrophiles: 1. Combined effects of selected SN2- and SNAr-reactive agents with a nonpolar narcotic. *Archives of environmental contamination and toxicology*. 2007;52(3):283-93.

Gagnaire F, Simon P, Bonnet P, De Ceaurriz J. The influence of simultaneous exposure to carbon disulfide and hydrogen sulfide on the peripheral nerve toxicity and metabolism of carbon disulfide in rats. *Toxicology letters*. 1986;34(2-3):175-83.

Gainer A, Cousins M, Hogan N, Siciliano SD. Petroleum Hydrocarbon Mixture Toxicity and a Trait Based Approach to Soil Invertebrate Species for Site Specific Risk Assessments. *Environmental toxicology and chemistry*. 2018.

Gainer A, Cousins M, Hogan N, Siciliano SD. Petroleum hydrocarbon mixture toxicity and a trait-based approach to soil invertebrate species for site-specific risk assessments. *Environmental Toxicology and Chemistry*. 2018;37(8):2222-34.

Gainer A, Hogan N, Siciliano SD. Soil invertebrate avoidance behavior identifies petroleum hydrocarbon contaminated soils toxic to sensitive plant species. *Journal of Hazardous Materials*. 2019;361:338-47.

Gajowik A, Radzikowska J, Dobrzynska M. The influence of bisphenol A and of combined exposure to X-rays and bisphenol A to somatic cells of the bone marrow and liver of mice. *Roczniki Panstwowego Zakladu Higieny*. 2011;62(4):439-44.

Gajski G, Ladeira C, Geric M, Garaj-Vrhovac V, Viegas S. Genotoxicity assessment of a selected cytostatic drug mixture in human lymphocytes: A study based on concentrations relevant for occupational exposure. *Environmental Research*. 2018;161:26-34.

Gama-Flores JL, Sarma SSS, Nandini S. Combined effects of exposure time and copper toxicity on the demography of *Moina macrocopa* (Crustacea: Cladocera). *Journal of environmental science and health Part B, Pesticides, food contaminants, and agricultural wastes*. 2009;44(1):86-93.

Ganesan S, Comstock AT, Kinker B, Mancuso P, Beck JM, Sajjan US. Combined exposure to cigarette smoke and nontypeable *Haemophilus influenzae* drives development of a COPD phenotype in mice. *Respiratory research*. 2014;15:11.

Ganier O, Bocquet S, Peiffer I, Brochard V, Arnaud P, Puy A, et al. Synergic reprogramming of mammalian cells by combined exposure to mitotic *Xenopus* egg extracts and transcription factors. *Proceedings of the National Academy of Sciences of the United States of America*. 2011;108(42):17331-6.

Gantchev TG, Brasseur N, van Lier JE. Combination toxicity of etoposide (VP-16) and photosensitisation with a water-soluble aluminium phthalocyanine in K562 human leukaemic cells. *British journal of cancer*. 1996;74(10):1570-7.

Gao G, Qian J, Fang D, Yu Y, Zhi J. Development of a mediated whole cell-based electrochemical biosensor for joint toxicity assessment of multi-pollutants using a mixed microbial consortium. *Analytica chimica acta*. 2016;924:21-8.

Gao G, Shi Q, Xu ZG, Xu JT, Campbell DA, Wu HY. Global warming interacts with ocean acidification to alter PSII function and protection in the diatom *Thalassiosira weissflogii*. *Environmental and Experimental Botany*. 2018;147:95-103.

Gao H, Zhu BB, Tao XY, Zhu YD, Tao XG, Tao FBA. Temporal Variability of Cumulative Risk Assessment on Phthalates in Chinese Pregnant Women: Repeated Measurement Analysis. *Environmental Science & Technology*. 2018;52(11):6585-91.

Gao H-T, Xu R, Cao W-X, Di Q-N, Li R-X, Lu L, et al. Combined effects of simultaneous exposure to six phthalates and emulsifier glycerol monostearate on male reproductive system in rats. *Toxicology and applied pharmacology*. 2018;341:87-97.

Gao HT, Xu R, Cao WX, Di QN, Li RX, Lu LG, et al. Combined effects of simultaneous exposure to six phthalates and emulsifier glycerol monostearate on male reproductive system in rats. *Toxicology and Applied Pharmacology*. 2018;341:87-97.

Gao ML, Zhang Z, Lv MT, Song WH, Lv YH. Toxic effects of nanomaterial-adsorbed cadmium on *Daphnia magna*. *Ecotoxicology and Environmental Safety*. 2018;148:261-8.

Gao X, Qiu R, Yao K, Luo Y, Zhou GR, Zhang JM, et al. Laser damage morphology in fused silica induced by simultaneous multi-wavelength irradiation with multiple longitudinal modes. *Laser Physics Letters*. 2018;15(10).

Gao XP, Liu YZ, Sun BW. A joint-probabilistic programming method for water resources optimal allocation under uncertainty: a case study in the Beiyun River, China. *Journal of Hydroinformatics*. 2018;20(2):393-409.

Gao Y, Kraft JC, Yu DN, Ho RJY. Recent developments of nanotherapeutics for targeted and long-acting, combination HIV chemotherapy. *European Journal of Pharmaceutics and Biopharmaceutics*. 2019;138:75-91.

Gao Y, Liang C, Zhang JH, Ma JJ, Wang JM, Niu RY, et al. Combination of Fluoride and SO₂ Induce DNA Damage and Morphological Alterations in Male Rat Kidney. *Cellular Physiology and Biochemistry*. 2018;50(2):734-44.

Gao Y, Ren XM, Wu JC, Hayat T, Alsaedi A, Cheng C, et al. Graphene oxide interactions with co-existing heavy metal cations: adsorption, colloidal properties and joint toxicity. *Environmental Science-Nano*. 2018;5(2):362-71.

Gao YF, Feng JF, Kang LL, Xu X, Zhu L. Concentration addition and independent action model: Which is better in predicting the toxicity for metal mixtures on zebrafish larvae. *Science of the Total Environment*. 2018;610:442-50.

Gaonkar OD, Nambi IM, Govindarajan SK. Soil organic amendments: impacts on sorption of organophosphate pesticides on an alluvial soil. *Journal of Soils and Sediments*. 2019;19(2):566-78.

Garcia E, Hernandez JC, Clemente S. Robustness of larval development of intertidal sea urchin species to simulated ocean warming and acidification. *Marine Environmental Research*. 2018;139:35-45.

Gardner HS, Jr., Brennan LM, Toussaint MW, Rosencrance AB, Boncavage-Hennessey EM, Wolfe MJ. Environmental complex mixture toxicity assessment. *Environmental health perspectives*. 1998;106 Suppl 6:1299-305.

Gargouri I, Khadhraoui M, Nisse C, Leroyer A, Masmoudi ML, Frimat P, et al. A case study on co-exposure to a mixture of organic solvents in a Tunisian adhesive-producing company. *Journal of occupational medicine and toxicology (London, England)*. 2011;6:28.

Garlantezec R, Chevrier C, Coiffec I, Celebi C, Cordier S. Combined effect of prenatal solvent exposure and GSTT1 or GSTM1 polymorphisms in the risk of birth defects. *Birth defects research Part A, Clinical and molecular teratology*. 2012;94(6):481-5.

Garreta-Lara E, Campos B, Barata C, Lacorte S, Tauler R. Combined effects of salinity, temperature and hypoxia on *Daphnia magna* metabolism. *Science of the Total Environment*. 2018;610:602-12.

Gatidou G, Stasinakis AS, Iatrou EI. Assessing single and joint toxicity of three phenylurea herbicides using *Lemna minor* and *Vibrio fischeri* bioassays. *Chemosphere*. 2015;119 Suppl:S69-74.

Gaudriault P, Mazaud-Guittot S, Lavoue V, Coiffec I, Lesne L, Dejucq-Rainsford N, et al. Endocrine Disruption in Human Fetal Testis Explants by Individual and Combined Exposures to Selected Pharmaceuticals, Pesticides, and Environmental Pollutants. *Environmental health perspectives*. 2017;125(8):087004.

Gauthier PT, Norwood WP, Prepas EE, Pyle GG. Metal-Polycyclic Aromatic Hydrocarbon Mixture Toxicity in *Hyalella azteca*. 1. Response Surfaces and Isoboles To Measure Non-additive Mixture Toxicity and Ecological Risk. *Environmental science & technology*. 2015;49(19):11772-9.

Gauthier PT, Norwood WP, Prepas EE, Pyle GG. Metal-Polycyclic Aromatic Hydrocarbon Mixture Toxicity in *Hyalella azteca*. 2. Metal Accumulation and Oxidative Stress as Interactive Co-toxic Mechanisms. *Environmental science & technology*. 2015;49(19):11780-8.

Geiger E, Hornek-Gausterer R, Sacan MT. Single and mixture toxicity of pharmaceuticals and chlorophenols to freshwater algae *Chlorella vulgaris*. *Ecotoxicology and environmental safety*. 2016;129:189-98.

Gelormini A, Cidaria D. Management of combined exposure to chemical agents: an operative proposal. *Giornale italiano di medicina del lavoro ed ergonomia*. 2003;25(3):348-9.

Genter EI, Mikhel'son VM, Zhestianikov VD. Unscheduled DNA synthesis in human peripheral blood lymphocytes undergoing combined exposure to gamma irradiation and methylmethane sulfonate. *Tsitologiya*. 1986;28(10):1091-6.

Genthe B, Le Roux WJ, Schachtschneider K, Oberholster PJ, Aneck-Hahn NH, Chamier J. Health risk implications from simultaneous exposure to multiple

environmental contaminants. *Ecotoxicology and environmental safety*. 2013;93:171-9.

Genuneit J, Strachan DP, Buchele G, Weber J, Loss G, Sozanska B, et al. The combined effects of family size and farm exposure on childhood hay fever and atopy. *Pediatric allergy and immunology : official publication of the European Society of Pediatric Allergy and Immunology*. 2013;24(3):293-8.

George TK, Liber K, Solomon KR, Sibley PK. Assessment of the probabilistic ecological risk assessment-toxic equivalent combination approach for evaluating pesticide mixture toxicity to zooplankton in outdoor microcosms. *Archives of environmental contamination and toxicology*. 2003;45(4):453-61.

Ghanbari A, Zibara K, Salari S, Ghareghani M, Rad P, Mohamed W, et al. Light-Emitting Diode (LED) Therapy Attenuates Neurotoxicity of Methanol-Induced Memory Impairment and Apoptosis in the Hippocampus. *Cns & Neurological Disorders-Drug Targets*. 2018;17(7):528-38.

Gharred T, Jebali J, Belgacem M, Mannai R, Achour S. Assessment of the individual and mixture toxicity of cadmium, copper and oxytetracycline, on the embryo-larval development of the sea urchin *Paracentrotus lividus*. *Environmental science and pollution research international*. 2016;23(18):18064-72.

Ghazanfar M, Shahid S, Qureshi IZ. Vitamin C attenuates biochemical and genotoxic damage in common carp (*Cyprinus carpio*) upon joint exposure to combined toxic doses of fipronil and buprofezin insecticides. *Aquatic toxicology (Amsterdam, Netherlands)*. 2018;196:43-52.

Ghazanfar M, Shahid S, Qureshi IZ. Vitamin C attenuates biochemical and genotoxic damage in common carp (*Cyprinus carpio*) upon joint exposure to combined toxic doses of fipronil and buprofezin insecticides. *Aquatic Toxicology*. 2018;196:43-52.

Ghazy A, Bassuoni MT. Response of concrete to cyclic environments and chloride-based salts. *Magazine of Concrete Research*. 2019;71(10):533-47.

Ghiani A, Fumagalli P, Nguyen Van T, Gentili R, Citterio S. The combined toxic and genotoxic effects of Cd and As to plant bioindicator *Trifolium repens* L. *PloS one*. 2014;9(6):e99239.

Ghimire RP, Kasurinen A, Haikio E, Holopainen JK, Julkunen-Tiitto R, Holopainen T, et al. Combined effects of elevated ozone, temperature, and nitrogen on stem phenolic concentrations of Scots pine (*Pinus sylvestris*) seedlings. *Canadian Journal of Forest Research*. 2019;49(3):246-55.

Ghorbel I, Elwej A, Jamoussi K, Boudawara T, Kamoun NG, Zeghal N. Potential protective effects of extra virgin olive oil on the hepatotoxicity induced by co-exposure of adult rats to acrylamide and aluminum. *Food & function*. 2015;6(4):1126-35.

Ghorbel I, Maktouf S, Fendri N, Jamoussi K, Ellouze Chaabouni S, Boudawara T, et al. Co-exposure to aluminum and acrylamide disturbs expression of metallothionein, proinflammatory cytokines and induces genotoxicity: Biochemical and histopathological changes in the kidney of adult rats. *Environmental toxicology*. 2016;31(9):1044-58.

Gibbons SI, Adams WC. Combined effects of ozone exposure and ambient heat on exercising females. *Journal of applied physiology: respiratory, environmental and exercise physiology*. 1984;57(2):450-6.

Gibel W, Gummel H. On the occurrence of plant carcinogenic and co-carcinogenic substances in human environment. *Das Deutsche Gesundheitswesen*. 1967;22(21):980-5.

Gill KK, Dumka VK. Antioxidant status in oral subchronic toxicity of fipronil and fluoride co-exposure in buffalo calves. *Toxicology and industrial health*. 2016;32(2):251-9.

Gill KK, Sandhu HS, Kaur R. Evaluation of lipid peroxidation and antioxidant status on fenvalerate, nitrate and their co-exposure in *Bubalus bubalis*. *Pesticide biochemistry and physiology*. 2015;123:19-23.

Gill TS, Pande J, Tewari H. Individual and combined toxicity of common pesticides to teleost *Puntius conchonus* Hamilton. *Indian journal of experimental biology*. 1991;29(2):145-8.

Ginzburg AL, Truong L, Tanguay RL, Hutchison JE. Synergistic Toxicity Produced by Mixtures of Biocompatible Gold Nanoparticles and Widely Used Surfactants. *Acs Nano*. 2018;12(6):5312-22.

Giorgi G, Pirazzini C, Bacalini MG, Giuliani C, Garagnani P, Capri M, et al. Assessing the combined effect of extremely low-frequency magnetic field exposure and oxidative stress on LINE-1 promoter methylation in human neural cells. *Radiation and environmental biophysics*. 2017;56(2):193-200.

Giroir LE, Huff WE, Kubena LF, Harvey RB, Elissalde MH, Witzel DA, et al. The individual and combined toxicity of kojic acid and aflatoxin in broiler chickens. *Poultry science*. 1991;70(6):1351-6.

Giulivo M, Stella E, Capri E, Esnaola A, de Alda ML, Diaz-Cruz S, et al. Assessing the effects of hydrological and chemical stressors on macroinvertebrate community in an Alpine river: The Adige River as a case study. *River Research and Applications*. 2019;35(1):78-87.

Glasmacher UA, Lang M, Keppler H, Langenhorst F, Neumann R, Schardt D, et al. Phase transitions in solids stimulated by simultaneous exposure to high pressure and relativistic heavy ions. *Physical review letters*. 2006;96(19):195701.

Glaviano A, Mothersill C, Case CP, Rubio MA, Newson R, Lyng F. Effects of hTERT on genomic instability caused by either metal or radiation or combined exposure. *Mutagenesis*. 2009;24(1):25-33.

Glover KP, Chen Z, Markell LK, Han X. Synergistic Gene Expression Signature Observed in TK6 Cells upon Co-Exposure to UVC-Irradiation and Protein Kinase C-Activating Tumor Promoters. *PloS one*. 2015;10(10):e0139850.

Godfrey A, Abdel-Moneim A, Sepulveda MS. Acute mixture toxicity of halogenated chemicals and their next generation counterparts on zebrafish embryos. *Chemosphere*. 2017;181:710-2.

Godugu D, Beedu SR. Synthesis, characterisation and anti-tumour activity of biopolymer based platinum nanoparticles and 5-fluorouracil loaded platinum nanoparticles. *Iet Nanobiotechnology*. 2019;13(3):282-92.

Goel K, Thomas RJ, Squires RW, Coutinho T, Trejo-Gutierrez JF, Somers VK, et al. Combined effect of cardiorespiratory fitness and adiposity on mortality in patients with coronary artery disease. *American heart journal*. 2011;161(3):590-7.

Gohari FA, Saranjam B, Asgari M, Omid L, Ekrami H, Moussavi-Najarkola SA. An Experimental Study of the Effects of Combined Exposure to Microwave and Heat on Gene Expression and Sperm Parameters in Mice. *Journal of human reproductive sciences*. 2017;10(2):128-34.

Goldoni M, Tagliaferri S. Dose-response or dose-effect curves in in vitro experiments and their use to study combined effects of neurotoxicants. *Methods in molecular biology (Clifton, NJ)*. 2011;758:415-34.

Goldstein BD. Combined exposure to ozone and nitrogen dioxide. *Environmental health perspectives*. 1976;13:107-10.

Goldstein BD. Combined exposure to ozone and nitrogen dioxide. *Environmental health perspectives*. 1979;30:87-9.

Gombojav B, Yi S-W, Sull JW, Nam CM, Ohrr H. Combined effects of cognitive impairment and hypertension on total mortality in elderly people: the Kangwha Cohort study. *Gerontology*. 2011;57(6):490-6.

Gomez-Eyles JL, Svendsen C, Lister L, Martin H, Hodson ME, Spurgeon DJ. Measuring and modelling mixture toxicity of imidacloprid and thiacloprid on *Caenorhabditis elegans* and *Eisenia fetida*. *Ecotoxicology and environmental safety*. 2009;72(1):71-9.

Gonalons CM, Farina WM. Impaired associative learning after chronic exposure to pesticides in young adult honey bees. *Journal of Experimental Biology*. 2018;221(7).

Goncalves AL, Simoes S, Barlocher F, Canhoto C. Leaf litter microbial decomposition in salinized streams under intermittency. *Science of the Total Environment*. 2019;653:1204-12.

Gong B, He EK, Qiu H, Li JQ, Ji J, Zhao L, et al. Phytotoxicity of individual and binary mixtures of rare earth elements (Y, La, and Ce) in relation to bioavailability. *Environmental Pollution*. 2019;246:114-21.

Gong Y, Wu JH, Vogt J, Le TB. Warming reduces the increase in N₂O emission under nitrogen fertilization in a boreal peatland. *Science of the Total Environment*. 2019;664:72-8.

Gongora E, Braune BM, Elliott KH. Nitrogen and sulfur isotopes predict variation in mercury levels in Arctic seabird prey. *Marine Pollution Bulletin*. 2018;135:907-14.

Gonzalez-Fernandez B, Rodriguez-Valdes E, Boente C, Menendez-Casares E, Fernandez-Brana A, Gallego JR. Long-term ongoing impact of arsenic contamination on the environmental compartments of a former mining-metallurgy area. *Science of the Total Environment*. 2018;610:820-30.

Goodale BC, Hampton TH, Ford EN, Jackson CE, Shaw JR, Stanton BA, et al. Profiling microRNA expression in Atlantic killifish (*Fundulus heteroclitus*) gill and responses to arsenic and hyperosmotic stress. *Aquatic Toxicology*. 2019;206:142-53.

Gooyers CE, McMillan EM, Noguchi M, Quadrilatero J, Callaghan JP. Characterizing the combined effects of force, repetition and posture on injury pathways and micro-structural damage in isolated functional spinal units from sub-acute-failure magnitudes of cyclic compressive loading. *Clinical biomechanics (Bristol, Avon)*. 2015;30(9):953-9.

Gorshinskaia IA, Grabovskova LL, Bronovitskaia ZG, Krichevskaya AA. Monoamine oxidase activity in the brain during adaptation to cold and simultaneous exposure to cold and hyperbaric oxygenation. *Fiziologicheskii zhurnal SSSR imeni I M Sechenova*. 1981;67(11):1611-6.

Gostyukhina AA, Zamoshchina TA, Zaitsev KV, Gutor SS, Zhukova OB, Svetlik MV, et al. Adaptive reactions of rats after light desynchronization and physical overwork. *Byulleten Sibirskoy Meditsiny*. 2018;17(3):22-34.

Gottardi M, Cedergreen N. The synergistic potential of azole fungicides does not directly correlate to the inhibition of cytochrome P450 activity in aquatic invertebrates. *Aquatic Toxicology*. 2019;207:187-96.

Govarts E, Remy S, Bruckers L, Den Hond E, Sioen I, Nelen V, et al. Combined Effects of Prenatal Exposures to Environmental Chemicals on Birth Weight. *International journal of environmental research and public health*. 2016;13(5).

Grabowska T, Skowronek R, Nowicka J, Sybirska H. Prevalence of hydrogen cyanide and carboxyhaemoglobin in victims of smoke inhalation during enclosed-space fires: a combined toxicological risk. *Clinical toxicology (Philadelphia, Pa)*. 2012;50(8):759-63.

Graeve K. Technic of angiocardigraphy; direct large scale procedure with simultaneous exposures in 2 planes. *Fortschritte auf dem Gebiete der Rontgenstrahlen und der Nuklearmedizin*. 1956;85(6):754-8.

Gramlich R, Aliahmadi E, Peiser M. In Vitro Induction of T Helper 17 Cells by Synergistic Activation of Human Monocyte-Derived Langerhans Cell-Like Cells with Bacterial Agonists. *International Journal of Molecular Sciences*. 2019;20(6).

Grant S, Traylor R, Bhalla K, McCrady C, Pettit GR. Effect of a combined exposure to cytosine arabinoside, bryostatin 1, and recombinant granulocyte-macrophage colony-stimulating factor on the clonogenic growth in vitro of normal and leukemic human hematopoietic progenitor cells. *Leukemia*. 1992;6(5):432-9.

Grassl J, Holt S, Cremen N, Peso M, Hahne D, Baer B. Synergistic effects of pathogen and pesticide exposure on honey bee (*Apis mellifera*) survival and immunity. *Journal of Invertebrate Pathology*. 2018;159:78-86.

Grebenshchikova EA, Salikhov KM, Sidorov VG, Shutayev VA, Yakovlev YP. Determining the Hydrogen Concentration from the Photovoltage of Pd-Oxide-InP MIS Structures. *Semiconductors*. 2018;52(10):1303-6.

Grebenshchikova EA, Sidorov VG, Shutaev VA, Yakovlev YP. Effect of the Hydrogen Concentration on the Pd/n-InP Schottky Diode Photocurrent. *Semiconductors*. 2019;53(2):234-6.

Green T, Toghill A, Moore R. The influence of co-exposure to dimethyldithiocarbamate on butadiene metabolism. *Chemico-biological interactions*. 2001;135-136:585-98.

Greenblatt M, Raha C, Roe C. Dimethylnitrosamine and hydrazine sulfate. An analysis of combined toxicity and pathology in mice. *Archives of environmental health*. 1968;17(3):315-20.

Gregorio V, Chevre N, Junghans M. Critical issues in using the common mixture toxicity models concentration addition or response addition on species sensitivity distributions: a theoretical approach. *Environmental toxicology and chemistry*. 2013;32(10):2387-95.

Gresits I, Necz PP, Janossy G, Thuroczy G. Extremely low frequency (ELF) stray magnetic fields of laboratory equipment: a possible co-exposure conducting experiments on cell cultures. *Electromagnetic biology and medicine*. 2015;34(3):244-50.

Grilo TF, Lopes AR, Sampaio E, Rosa R, Cardoso PG. Sex differences in oxidative stress responses of tropical topshells (*Trochus histrio*) to increased temperature and high pCO₂. *Marine Pollution Bulletin*. 2018;131:252-9.

Groll-Knapp E, Haider M, Kienzl K, Handler A, Trimmel M. Changes in discrimination learning and brain activity (ERP's) due to combined exposure to NO and CO in rats. *Toxicology*. 1988;49(2-3):441-7.

Groten JP, Schoen ED, Feron VJ. Use of factorial designs in combination toxicity studies. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 1996;34(11-12):1083-9.

Groves MD, Puduvalli VK, Conrad CA, Gilbert MR, Yung WKA, Jaeckle K, et al. Phase II trial of temozolomide plus marimastat for recurrent anaplastic gliomas: a relationship among efficacy, joint toxicity and anticonvulsant status. *Journal of neuro-oncology*. 2006;80(1):83-90.

Gruber CM, Jr. Combined toxicity of morphine sulfate, nalorphine hydrochloride, and levallorphan tartrate. *Archives internationales de pharmacodynamie et de therapie*. 1955;103(4):489-94.

Grytting VS, Olderbo BP, Holme JA, Samuelsen JT, Solhaug A, Becher R, et al. Di-n-butyl phthalate modifies PMA-induced macrophage differentiation of THP-1 monocytes via PPAR gamma. *Toxicology in Vitro*. 2019;54:168-77.

Gu W, Zhu P, Jiang D, He X, Li Y, Ji J, et al. A novel and simple cell-based electrochemical impedance biosensor for evaluating the combined toxicity of DON and ZEN. *Biosensors & bioelectronics*. 2015;70:447-54.

Guan R, Wang T, Chen J, Luo W, Liu M. The activation of microglia caused by lead and manganese co-exposure induces activation of astrocytes and decrease of glutamine synthetase activity. *Xi bao yu fen zi mian yi xue za zhi = Chinese journal of cellular and molecular immunology*. 2016;32(3):313-8.

Guilhermino L, Vieira LR, Ribeiro D, Tavares AS, Cardoso V, Alves A, et al. Uptake and effects of the antimicrobial florfenicol, microplastics and their mixtures on freshwater exotic invasive bivalve *Corbicula fluminea*. *Science of the Total Environment*. 2018;622:1131-42.

Guimaraes B, Bindow C, Amorim MJB, Kehrer A, Coors A. Mixture toxicity assessment of a biocidal product based on reproduction and avoidance behaviour of the collembolan *Folsomia candida*. *Ecotoxicology and Environmental Safety*. 2018;165:284-90.

Gulverdashvili NA. Changes in the clonogenic ability of solid tumor cells during combined exposure to hyperthermia and irradiation. *Radiobiologia*. 1987;27(5):640-3.

Gummadidala PM, Omebeyinje MH, Burch JA, Chakraborty P, Biswas PK, Banerjee K, et al. Complementary feeding may pose a risk of simultaneous exposures to aflatoxin M1 and deoxynivalenol in Indian infants and toddlers: Lessons from a mini-survey of food samples obtained from Kolkata, India. *Food and Chemical Toxicology*. 2019;123:9-15.

Gunawickrama SHNP, Aarsaether N, Orbea A, Cajaraville MP, Goksoyr A. PCB77 (3,3',4,4'-tetrachlorobiphenyl) co-exposure prolongs CYP1A induction, and sustains oxidative stress in B(a)P-exposed turbot, *Scophthalmus maximus*, in a long-term study. *Aquatic toxicology (Amsterdam, Netherlands)*. 2008;89(2):65-74.

Guo B, Zebda R, Drake SJ, Sayes CM. Synergistic effect of co-exposure to carbon black and Fe2O3 nanoparticles on oxidative stress in cultured lung epithelial cells. *Particle and fibre toxicology*. 2009;6:4.

Guo CJ, Lou Q, Ge G. RESEARCH ON THE TOXICITY MECHANISM FOR SULFONAMIDE TO AQUATIC ALGAE. *Fresenius Environmental Bulletin*. 2018;27(6):4402-12.

Guo SN, Zheng JL, Yuan SS, Zhu QL. Effects of heat and cadmium exposure on stress-related responses in the liver of female zebrafish: Heat increases cadmium toxicity. *Science of the Total Environment*. 2018;618:1363-70.

Guo TR, Zhang GP, Zhang YH. Physiological changes in barley plants under combined toxicity of aluminum, copper and cadmium. *Colloids and surfaces B, Biointerfaces*. 2007;57(2):182-8.

Guo YY, Chen LG, Wu J, Hua JH, Yang LH, Wang QW, et al. Parental co-exposure to bisphenol A and nano-TiO₂ causes thyroid endocrine disruption and developmental neurotoxicity in zebrafish offspring. *Science of the Total Environment*. 2019;650:557-65.

Guo ZL, Ma MJ, Cai CF, Wu YW. Combined effects of simulated rainfall and overland flow on sediment and solute transport in hillslope erosion. *Journal of Soils and Sediments*. 2018;18(3):1120-32.

Guo ZQ, Li ZX, Ye HZ, Xiao J, Chen LZ, Green L, et al. Simultaneous uptake of Cd from sediment, water and diet in a demersal marine goby *Mugilogobius chulae*. *Journal of Hazardous Materials*. 2019;364:143-50.

Gupta AD, Karthikeyan S. Individual and combined toxic effect of nickel and chromium on biochemical constituents in *E. coli* using FTIR spectroscopy and Principle component analysis. *Ecotoxicology and environmental safety*. 2016;130:289-94.

Gupta MS, Malik A. Combined toxicity due to alcohol and aluminium phosphide. *The Journal of the Association of Physicians of India*. 1995;43(1):74.

Gust KA, Chaitankar V, Ghosh P, Wilbanks MS, Chen XF, Barker ND, et al. Multiple environmental stressors induce complex transcriptomic responses indicative of phenotypic outcomes in Western fence lizard. *Bmc Genomics*. 2018;19.

Gust KA, Lotufo GR, Stanley JK, Wilbanks MS, Chappell P, Barker ND. Transcriptomics provides mechanistic indicators of mixture toxicology for IMX-101 and IMX-104 formulations in fathead minnows (*Pimephales promelas*). *Aquatic Toxicology*. 2018;199:138-51.

Gust KA. Joint toxicity of cadmium and phenanthrene in the freshwater amphipod *Hyalella azteca*. Archives of environmental contamination and toxicology. 2006;50(1):7-13.

Gutierrez-Praena D, Guzman-Guillen R, Pichardo S, Moreno FJ, Vasconcelos V, Jos A, et al. Cytotoxic and morphological effects of microcystin-LR, cylindrospermopsin, and their combinations on the human hepatic cell line HepG2. Environmental Toxicology. 2019;34(3):240-51.

Guyen O, Bach L, Munk P, Dinh KV, Mariani P, Nielsen TG. Microplastic does not magnify the acute effect of PAH pyrene on predatory performance of a tropical fish (*Lates calcarifer*). Aquatic Toxicology. 2018;198:287-93.

Guzman-Rangel G, Montalvo D, Smolders E. Pronounced Antagonism of Zinc and Arsenate on Toxicity to Barley Root Elongation in Soil. Environments. 2018;5(7).

Guzman-Rangel G, Versieren L, Qiu H, Smolders E. Additive toxicity of zinc and arsenate on barley (*Hordeum vulgare*) root elongation. Environmental toxicology and chemistry. 2017;36(6):1556-62.

Gvenetadze RO, Alekhina SM. Changes in the nicotinamide coenzyme content of the liver of rats with combined exposure to kelthane and phosphamide. Gigiena i sanitariia. 1984(2):75-6.

Gwynn RH, Salaman MH. Studies on co-carcinogenesis. SH-reactors and other substances tested for co-carcinogenic action in mouse skin. British journal of cancer. 1953;7(4):482-9.

Haberstroh KM, Kaefer M, DePaola N, Frommer SA, Bizios R. A novel in-vitro system for the simultaneous exposure of bladder smooth muscle cells to mechanical strain and sustained hydrostatic pressure. Journal of biomechanical engineering. 2002;124(2):208-13.

Hackenberger DK, Stjepanovic N, Loncaric Z, Hackenberger BK. Effects of single and combined exposure to nano and bulk zinc-oxide and propiconazole on *Enchytraeus albidus*. Chemosphere. 2019;224:572-9.

Haegerbaeumer A, Hoss S, Heininger P, Traunspurger W. Is *Caenorhabditis elegans* representative of freshwater nematode species in toxicity testing? Environmental Science and Pollution Research. 2018;25(3):2879-88.

Hahn EJ, Rademacher K, Wiggins A, Rayens MK. Personalized Report-Back to Renters on Radon and Tobacco Smoke Exposure. Journal of Environmental Health. 2018;80(9):8-14.

Hall CE, Hall O. Augmentation of hormone-induced hypertensive cardiovascular disease by simultaneous exposure to stress. *Acta endocrinologica*. 1959;30(4):557-66.

Halldin K, Axelsson J, Brunstrom B. Embryonic co-exposure to methoxychlor and Clophen A50 alters sexual behavior in adult male quail. *Archives of toxicology*. 2005;79(4):237-42.

Hallett KC, Atfield A, Comber S, Hutchinson TH. Developmental toxicity of metaldehyde in the embryos of *Lymnaea stagnalis* (Gastropoda: Pulmonata) co-exposed to the synergist piperonyl butoxide. *The Science of the total environment*. 2016;543(Pt A):37-43.

Ham A, Michelson HC. Does the form of delivering incentives in conditional cash transfers matter over a decade later? *Journal of Development Economics*. 2018;134:96-108.

Hambach R, Lison D, D'Haese PC, Weyler J, De Graef E, De Schryver A, et al. Co-exposure to lead increases the renal response to low levels of cadmium in metallurgy workers. *Toxicology letters*. 2013;222(2):233-8.

Hammerlindl H, Menon DR, Hammerlindl S, Al Emran A, Torrano J, Sproesser K, et al. Acetylsalicylic Acid Governs the Effect of Sorafenib in RAS-Mutant Cancers. *Clinical Cancer Research*. 2018;24(5):1090-102.

Hammill E, Johnson E, Atwood TB, Harianto J, Hinchliffe C, Calosi P, et al. Ocean acidification alters zooplankton communities and increases top-down pressure of a cubozoan predator. *Global Change Biology*. 2018;24(1):E128-E38.

Hampar B, Boyd AL. Interaction of oncornaviruses and herpesviruses: a hypothesis proposing a co-carcinogenic role for herpesviruses in transformation--a review. *IARC scientific publications*. 1978(24 Pt 2):583-9.

Han A, Elkind MM. Enhanced killing of Chinese hamster cells following combined exposure to 'sunlight' and x-rays. *Photochemistry and photobiology*. 1980;31(3):281-5.

Han JR, Zhang XR. Evaluating the Comparative Toxicity of DBP Mixtures from Different Disinfection Scenarios: A New Approach by Combining Freeze Drying or Rotoevaporation with a Marine Polychaete Bioassay. *Environmental Science & Technology*. 2018;52(18):10552-61.

Han P, Kurland AR, Giordano AN, Nanayakkara SU, Blake MM, Pochas CM, et al. Heads and tails: simultaneous exposed and buried interface imaging of monolayers. *ACS nano*. 2009;3(10):3115-21.

Han SG, Andrews R, Gairola CG, Bhalla DK. Acute pulmonary effects of combined exposure to carbon nanotubes and ozone in mice. *Inhalation toxicology*. 2008;20(4):391-8.

Han WS, Yang YM, Gao JL, Zhao DX, Ren CC, Wang SJ, et al. Chronic toxicity and biochemical response of *Apis cerana cerana* (Hymenoptera: Apidae) exposed to acetamiprid and propiconazole alone or combined. *Ecotoxicology*. 2019;28(4):399-411.

Hanbury RD, Was GS. Effect of Grain Orientation on Irradiation Assisted Corrosion of 316L Stainless Steel in Simulated PWR Primary Water. In: Jackson JH, Paraventi D, Wright M, editors. *Proceedings of the 18th International Conference on Environmental Degradation of Materials in Nuclear Power Systems - Water Reactors, Vol 2. Minerals Metals & Materials Series* 2018. p. 1087-96.

Hani YMI, Turies C, Palluel O, Delahaut L, Bado-Nilles A, Geffard A, et al. Effects of a chronic exposure to different water temperatures and/or to an environmental cadmium concentration on the reproduction of the threespine stickleback (*Gasterosteus aculeatus*). *Ecotoxicology and Environmental Safety*. 2019;174:48-57.

Hani YMI, Turies C, Palluel O, Delahaut L, Gaillet V, Bado-nilles A, et al. Effects of chronic exposure to cadmium and temperature, alone or combined, on the threespine stickleback (*Gasterosteus aculeatus*): Interest of digestive enzymes as biomarkers. *Aquatic Toxicology*. 2018;199:252-62.

Hannam ML, Bamber SD, Galloway TS, John Moody A, Jones MB. Functional immune response in *Pecten maximus*: combined effects of a pathogen-associated molecular pattern and PAH exposure. *Fish & shellfish immunology*. 2010;28(1):249-52.

Hannan MA, Recio L, Deluca PP, Enoch H. Co-mutagenic effects of 2-aminoanthracene and cigarette smoke condensate on smoker's urine in the Ames Salmonella assay system. *Cancer letters*. 1981;13(3):203-12.

Hanson ML, Sibley PK, Mabury SA, Solomon KR, Muir DCG. Trichloroacetic acid (TCA) and trifluoroacetic acid (TFA) mixture toxicity to the macrophytes *Myriophyllum spicatum* and *Myriophyllum sibiricum* in aquatic microcosms. *The Science of the total environment*. 2002;285(1-3):247-59.

Hao L, Garmash O, Ehn M, Miettinen P, Massoli P, Mikkonen S, et al. Combined effects of boundary layer dynamics and atmospheric chemistry on

aerosol composition during new particle formation periods. *Atmospheric Chemistry and Physics*. 2018;18(23):17705-16.

Hapieienko DD, Lavrenchuk HI, Asmolkova VS, Oksamytnyi VN. Features of biological effects in cell culture in the combined exposure to ionizing radiation and copper ions. *Problemy radiatsiinoi medytsyny ta radiobiolohii*. 2014;19:398-406.

Hapieienko D, Lavrenchuk H. Radiomodifying and antitoxic effect of natural polymineral substances on the viability of the cell line L929 under the combined exposure to ionizing radiation and ions of heavy metals. *Problemy radiatsiinoi medytsyny ta radiobiolohii*. 2015;20:474-89.

Hapieienko DD. Features of cellular effects of combined exposure to ionizing radiation and copper ions. *Problemy radiatsiinoi medytsyny ta radiobiolohii*. 2013(18):305-12.

Hardy ML, Stedeford T. Developmental neurotoxicity in neonatal mice following co-exposure to PCB 153 and methyl mercury: interaction or false positive? *Toxicology*. 2008;248(2-3):160-1; author reply 2-3.

Harpenslager SF, Overbeek CC, van Zuidam JP, Roelofs JGM, Kosten S, Lamers LPM. Peat capping: Natural capping of wet landfills by peat formation. *Ecological Engineering*. 2018;114:146-53.

Harreus UA, Baumeister P, Wallner BC, Berghaus A, Kleinsasser NH. Carcinogenic and co-carcinogenic effects of metals and ethanol on human salivary gland tissue. *Hno*. 2005;53(2):155-62.

Hart CL, Davey Smith G, Gruer L, Watt GCM. The combined effect of smoking tobacco and drinking alcohol on cause-specific mortality: a 30 year cohort study. *BMC public health*. 2010;10:789.

Hart CM, Tolson JK, Block ER. Quantitative fatty acid analyses in cultured porcine pulmonary artery endothelial cells: the combined effects of fatty acid supplementation and oxidant exposure. *Journal of cellular physiology*. 1992;153(1):76-87.

Hasan S, Albayaty YNS, Thierry B, Prestidge CA, Thomas N. Mechanistic studies of the antibiofilm activity and synergy with antibiotics of isosorbide mononitrate. *European Journal of Pharmaceutical Sciences*. 2018;115:50-6.

Hasegawa R, Takahashi M, Furukawa F, Toyoda K, Sato H, Hayashi Y. Co-carcinogenic effect of retinyl acetate on forestomach carcinogenesis of male F344

rats induced with butylated hydroxyanisole. Japanese journal of cancer research : Gann. 1988;79(3):320-8.

Hasegawa T, Fujimori S, Havlik P, Valin H, Bodirsky BL, Doelman JC, et al. Risk of increased food insecurity under stringent global climate change mitigation policy. Nature Climate Change. 2018;8(8):699-+.

Hashemi S, Blust R, De Boeck G. Combined effects of different food rations and sublethal copper exposure on growth and energy metabolism in common carp. Archives of environmental contamination and toxicology. 2008;54(2):318-24.

Hass U, Christiansen S, Axelstad M, Scholze M, Boberg J. Combined exposure to low doses of pesticides causes decreased birth weights in rats. Reproductive toxicology (Elmsford, NY). 2017;72:97-105.

Hass U, Scholze M, Christiansen S, Dalgaard M, Vinggaard AM, Axelstad M, et al. Combined exposure to anti-androgens exacerbates disruption of sexual differentiation in the rat. Environmental health perspectives. 2007;115 Suppl 1:122-8.

Hassold E, Backhaus T. The predictability of mixture toxicity of demethylase inhibiting fungicides to *Daphnia magna* depends on life-cycle parameters. Aquatic toxicology (Amsterdam, Netherlands). 2014;152:205-14.

Hatoum NS, Davis WM, Elsohly MA, Turner CE. Perinatal exposure to cannabichromene and delta 9-tetrahydrocannabinol: separate and combined effects on viability of pups and on male reproductive system at maturity. Toxicology letters. 1981;8(3):141-6.

Haug LS, Sakhi AK, Cequier E, Casas M, Maitre L, Basagana X, et al. In-utero and childhood chemical exposome in six European mother-child cohorts. Environment International. 2018;121:751-63.

Hayman NT, Hentschel BT, Renick VC, Anderson TW. Combined effects of flow speed and sub-lethal insecticide exposure on predator-prey interactions between the California killifish and an infaunal polychaete. Ecotoxicology. 2019;28(1):117-31.

He F, Chen S, Tang X, Gan W, Tao B, Wen B. Biological monitoring of combined exposure to organophosphates and pyrethroids. Toxicology letters. 2002;134(1-3):119-24.

He H, Chen G, Yu J, He J, Huang X, Li S, et al. Individual and joint toxicity of three chloroacetanilide herbicides to freshwater cladoceran *Daphnia carinata*. Bulletin of environmental contamination and toxicology. 2013;90(3):344-50.

He M, Ichinose T, Yoshida S, Takano H, Nishikawa M, Sun G, et al. Induction of immune tolerance and reduction of aggravated lung eosinophilia by co-exposure to Asian sand dust and ovalbumin for 14weeks in mice. *Allergy, asthma, and clinical immunology : official journal of the Canadian Society of Allergy and Clinical Immunology*. 2013;9(1):19.

He TH, Liu DY, Yuan JJ, Ni K, Zaman M, Luo JF, et al. A two years study on the combined effects of biochar and inhibitors on ammonia volatilization in an intensively managed rice field. *Agriculture Ecosystems & Environment*. 2018;264:44-53.

He Y, Lam TH, Jiang B, Wang J, Sai X, Fan L, et al. Combined effects of tobacco smoke exposure and metabolic syndrome on cardiovascular risk in older residents of China. *Journal of the American College of Cardiology*. 2009;53(4):363-71.

He YM, Li X, Zhan FD, Xie CM, Zu YQ, Li Y, et al. Resistance-related physiological response of rice leaves to the compound stress of enhanced UV-B radiation and *Magnaporthe oryzae*. *Journal of Plant Interactions*. 2018;13(1):321-8.

He ZQ, Zhang TH, Zhao XY, Liu XP. THE PHYSIOLOGICAL-MORPHOLOGICAL (LEAF-LEVEL) RESPONSES OF SOYBEAN (GLYCINE MAX L. MERR.) TO THREE REGIMES OF DEFICIT IRRIGATION AND FERTILIZER COUPLING IN HORQIN SANDY LAND, NORTHEASTERN CHINA. *Fresenius Environmental Bulletin*. 2018;27(12B):9828-39.

Health effects of combined exposures in the work environment. Report of a WHO expert committee. *World Health Organization technical report series*. 1981;662:1-76.

Hedgpeth BM, Griffitt RJ. Simultaneous exposure to chronic hypoxia and dissolved polycyclic aromatic hydrocarbons results in reduced egg production and larval survival in the sheepshead minnow (*Cyprinodon variegatus*). *Environmental toxicology and chemistry*. 2016;35(3):645-51.

Heffernan J, Mineau P, Falk R, Wickstrom M. Combined effect of short-term dehydration and sublethal acute oral dicrotophos exposure confounds the diagnosis of anticholinesterase exposure in common quail (*Coturnix coturnix*) using plasma cholinesterase activity. *Journal of wildlife diseases*. 2012;48(3):695-706.

Hegaret H, Smolowitz RM, Sunila I, Shumway SE, Alix J, Dixon M, et al. Combined effects of a parasite, QPX, and the harmful-alga, *Prorocentrum*

minimum on northern quahogs, *Mercenaria mercenaria*. Marine environmental research. 2010;69(5):337-44.

Heinemann SD, Posimo JM, Mason DM, Hutchison DF, Leak RK. Synergistic stress exacerbation in hippocampal neurons: Evidence favoring the dual-hit hypothesis of neurodegeneration. Hippocampus. 2016;26(8):980-94.

Heise T, Schmidt F, Knebel C, Rieke S, Haider W, Geburek I, et al. Hepatotoxic combination effects of three azole fungicides in a broad dose range. Archives of Toxicology. 2018;92(2):859-72.

Hempson TN, Graham NAI, MacNeil MA, Hoey AS, Wilson SK. Ecosystem regime shifts disrupt trophic structure. Ecological Applications. 2018;28(1):191-200.

Hengstler JG, Bolm-Audorff U, Faldum A, Janssen K, Reifenrath M, Gotte W, et al. Occupational exposure to heavy metals: DNA damage induction and DNA repair inhibition prove co-exposures to cadmium, cobalt and lead as more dangerous than hitherto expected. Carcinogenesis. 2003;24(1):63-73.

Henner P, Bredoire F, Tailliez A, Coppin F, Pierrisnard S, Camilleri V, et al. Influence of root exudation of white lupine (*Lupinus albus* L.) on uranium phytoavailability in a naturally uranium-rich soil. Journal of Environmental Radioactivity. 2018;190:39-50.

Hennes EC, Galay Burgos M, Hamer M, Pemberton M, Travis K, Rodriguez C. Workshop: combined exposure to chemicals. Regulatory toxicology and pharmacology : RTP. 2012;63(1):53-4.

Henschler D, Bolt HM, Jonker D, Pieters MN, Groten JP. Experimental designs and risk assessment in combination toxicology: panel discussion. Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association. 1996;34(11-12):1183-5.

Herbert FA, Hessel PA, Melenka LS, Yoshida K, Nakaza M. Pulmonary effects of simultaneous exposures to MDI formaldehyde and wood dust on workers in an oriented strand board plant. Journal of occupational and environmental medicine. 1995;37(4):461-5.

Hermens J, Busser F, Leeuwangh P, Musch A. Quantitative structure-activity relationships and mixture toxicity of organic chemicals in *Photobacterium phosphoreum*: the Microtox test. Ecotoxicology and environmental safety. 1985;9(1):17-25.

Hermens J, Leeuwangh P, Musch A. Joint toxicity of mixtures of groups of organic aquatic pollutants to the guppy (*Poecilia reticulata*). *Ecotoxicology and environmental safety*. 1985;9(3):321-6.

Hermens J, Leeuwangh P, Musch A. Quantitative structure-activity relationships and mixture toxicity studies of chloro- and alkylanilines at an acute lethal toxicity level to the guppy (*Poecilia reticulata*). *Ecotoxicology and environmental safety*. 1984;8(4):388-94.

Hermens J, Leeuwangh P. Joint toxicity of mixtures of 8 and 24 chemicals to the guppy (*Poecilia reticulata*). *Ecotoxicology and environmental safety*. 1982;6(3):302-10.

Hernandez CA, Sangil C, Fanai A, Hernandez JC. Macroalgal response to a warmer ocean with higher CO₂ concentration. *Marine Environmental Research*. 2018;136:99-105.

Hernando MD, Ejerhoon M, Fernandez-Alba AR, Chisti Y. Combined toxicity effects of MTBE and pesticides measured with *Vibrio fischeri* and *Daphnia magna* bioassays. *Water research*. 2003;37(17):4091-8.

Herr C, Han G, Li D, Tschernig T, Dinh QT, BeiSswenger C, et al. Combined exposure to bacteria and cigarette smoke resembles characteristic phenotypes of human COPD in a murine disease model. *Experimental and toxicologic pathology : official journal of the Gesellschaft fur Toxikologische Pathologie*. 2015;67(3):261-9.

Herraiz T. Tetrahydro-beta-carboline-3-carboxylic acid compounds in fish and meat: possible precursors of co-mutagenic beta-carbolines norharman and harman in cooked foods. *Food additives and contaminants*. 2000;17(10):859-66.

Herrala M, Kumari K, Koivisto H, Luukkonen J, Tanila H, Naarala J, et al. Genotoxicity of intermediate frequency magnetic fields in vitro and in vivo. *Environmental Research*. 2018;167:759-69.

Herring G, Eagles-Smith CA, Varland DE. Mercury and lead exposure in avian scavengers from the Pacific Northwest suggest risks to California condors: Implications for reintroduction and recovery. *Environmental Pollution*. 2018;243:610-9.

Hersoug L-G, Arnau J. A built-in co-carcinogenic effect due to viruses involved in latent or persistent infections. *Medical hypotheses*. 2007;68(5):1001-8.

Hertel S, Schwaninger M, Helmchen C. Combined toxicity of penicillin and aspirin therapy may elicit bilateral vestibulopathy. *Clinical neurology and neurosurgery*. 2013;115(7):1114-6.

Herve P, Tiegs SD, Grellier S, Wantzen KM, Isselin-Nondedeu F. Combined Effects of Vegetation and Drought on Organic-Matter Decomposition in Vernal Pool Soils. *Wetlands*. 2019;39(2):321-7.

Heusser K, Tank J, Holz O, May M, Brinkmann J, Engeli S, et al. Ultrafine particles and ozone perturb norepinephrine clearance rather than centrally generated sympathetic activity in humans. *Scientific Reports*. 2019;9.

Hicks RM, Wakefield JS, Chowaniec J. Letter: Co-carcinogenic action of saccharin in the chemical induction of bladder cancer. *Nature*. 1973;243(5406):347-9.

Hildebrand J, Kenis Y. Additive toxicity of vincristine and other drugs for the peripheral nervous system. Three case reports. *Acta neurologica Belgica*. 1971;71(6):486-91.

Hirano S, Kakinuma S, Amasaki Y, Nishimura M, Imaoka T, Fujimoto S, et al. Ikaros is a critical target during simultaneous exposure to X-rays and N-ethyl-N-nitrosourea in mouse T-cell lymphomagenesis. *International journal of cancer*. 2013;132(2):259-68.

Hnizdo E, Baskind E, Sluis-Cremer GK. Combined effect of silica dust exposure and tobacco smoking on the prevalence of respiratory impairments among gold miners. *Scandinavian journal of work, environment & health*. 1990;16(6):411-22.

Hnizdo E. Combined effect of silica dust and tobacco smoking on mortality from chronic obstructive lung disease in gold miners. *British journal of industrial medicine*. 1990;47(10):656-64.

Ho NHE, Not C. Selective accumulation of plastic debris at the breaking wave area of coastal waters. *Environmental Pollution*. 2019;245:702-10.

Hochmuth JD, Janssen CR, De Schamphelaere KAC. Temperature and food concentration have limited influence on the mixture toxicity of copper and *Microcystis aeruginosa* to *Daphnia magna*. *Environmental toxicology and chemistry*. 2016;35(3):742-9.

Hodges G, Roberts DW, Marshall SJ, Dearden JC. Defining the toxic mode of action of ester sulphonates using the joint toxicity of mixtures. *Chemosphere*. 2006;64(1):17-25.

Hodille EA, Markelj S, Schwarz-Selinger T, Zaloznik A, Pecovnik M, Kelemen M, et al. Stabilization of defects by the presence of hydrogen in tungsten: simultaneous W-ion damaging and D-atom exposure. *Nuclear Fusion*. 2019;59(1).

Hof AR, Allen AM. An uncertain future for the endemic Galliformes of the Caucasus. *Science of the Total Environment*. 2019;651:725-35.

Hofer T, Pohjanvirta R, Spielmann P, Viluksela M, Buchmann DP, Wenger RH, et al. Simultaneous exposure of rats to dioxin and carbon monoxide reduces the xenobiotic but not the hypoxic response. *Biological chemistry*. 2004;385(3-4):291-4.

Hogan MK, Kovalycsik T, Sun Q, Rajagopalan S, Nelson RJ. Combined effects of exposure to dim light at night and fine particulate matter on C3H/HeNHsd mice. *Behavioural brain research*. 2015;294:81-8.

Hoher N, Turja R, Brenner M, Nyholm JR, Ostin A, Leffler P, et al. Toxic effects of chemical warfare agent mixtures on the mussel *Mytilus trossulus* in the Baltic Sea: A laboratory exposure study. *Marine Environmental Research*. 2019;145:112-22.

Hong F, Jin T, Zhang A. Risk assessment on renal dysfunction caused by co-exposure to arsenic and cadmium using benchmark dose calculation in a Chinese population. *Biometals : an international journal on the role of metal ions in biology, biochemistry, and medicine*. 2004;17(5):573-80.

Hong Q, Zhou S, Zhao H, Peng J, Li Y, Shang Y, et al. Allergenicity of recombinant *Humulus japonicus* pollen allergen 1 after combined exposure to ozone and nitrogen dioxide. *Environmental pollution (Barking, Essex : 1987)*. 2018;234:707-15.

Hong Q, Zhou SM, Zhao H, Peng JX, Li Y, Shang Y, et al. Allergenicity of recombinant *Humulus japonicus* pollen allergen 1 after combined exposure to ozone and nitrogen dioxide. *Environmental Pollution*. 2018;234:707-15.

Hoondert RPJ, Hilbers JP, Hendriks AJ, Huijbregts MAJ. Deriving Field-Based Ecological Risks for Bird Species. *Environmental Science & Technology*. 2018;52(6):3716-26.

Hopf NB, Spring P, Hirt-Burri N, Jimenez S, Sutter B, Vernez D, et al. Polycyclic aromatic hydrocarbons (PAHs) skin permeation rates change with simultaneous exposures to solar ultraviolet radiation (UV-S). *Toxicology Letters*. 2018;287:122-30.

Hori M. 20-methylcholanthrene-induced mice skin cancer: Part 3: Studies on co-carcinogenic and suppressive factors (author's transl). *Nihon Hifuka Gakkai zasshi The Japanese journal of dermatology*. 1981;91(1):43-52.

Hornung PS, Lazzarotto SRD, Bellettini MB, Lazzarotto M, Beta T, Ribani RH, et al. Novel Oxidized and UV-Irradiated *Araucaria angustifolia* Pine Seed Starch for Enhanced Functional Properties. *Starch-Starke*. 2019;71(3-4).

Horton AA, Vijver MG, Lahive E, Spurgeon DJ, Svendsen C, Heutink R, et al. Acute toxicity of organic pesticides to *Daphnia magna* is unchanged by co-exposure to polystyrene microplastics. *Ecotoxicology and Environmental Safety*. 2018;166:26-34.

Hotta S, Sugisawa T, Matsui T, Itoh T, Yamamura K. Combined effects of acute lead acetate exposure and tone exposure of the guinea pig cochlea. *European archives of oto-rhino-laryngology : official journal of the European Federation of Oto-Rhino-Laryngological Societies (EUFOS) : affiliated with the German Society for Oto-Rhino-Laryngology - Head and Neck Surgery*. 1996;253(8):488-93.

Hou L, Zhang C, Wang K, Liu X, Wang H, Che Y, et al. Paraquat and maneb co-exposure induces noradrenergic locus coeruleus neurodegeneration through NADPH oxidase-mediated microglial activation. *Toxicology*. 2017;380:1-10.

Hou LL, Zhou X, Gan F, Liu ZX, Zhou YJ, Qian G, et al. Combination of Selenomethionine and N-Acetylcysteine Alleviates the Joint Toxicities of Aflatoxin B1 and Ochratoxin A by ERK MAPK Signal Pathway in Porcine Alveolar Macrophages. *Journal of Agricultural and Food Chemistry*. 2018;66(23):5913-23.

Hsieh S-H, Tsai K-P, Chen C-Y. The combined toxic effects of nonpolar narcotic chemicals to *Pseudokirchneriella subcapitata*. *Water research*. 2006;40(10):1957-64.

Hsueh YM, Chen WJ, Lin YC, Huang CY, Shiue HS, Yang SM, et al. Adiponectin gene polymorphisms and obesity increase the susceptibility to arsenic-related renal cell carcinoma. *Toxicology and Applied Pharmacology*. 2018;350:11-20.

Hu GX, Li JW, Shan YY, Li XH, Zhu QQ, Li HT, et al. In utero combined di-(2-ethylhexyl) phthalate and diethyl phthalate exposure cumulatively impairs rat fetal Leydig cell development. *Toxicology*. 2018;395:23-33.

Hu J, Zhang ZC, Zhang C, Liu SX, Zhang HF, Li D, et al. Al₂O₃ nanoparticle impact on the toxic effect of Pb on the marine microalga *Isochrysis galbana*. *Ecotoxicology and Environmental Safety*. 2018;161:92-8.

Hu MJ, Wilson BJ, Sun ZG, Huang JF, Tong C. Effects of nitrogen and sulphate addition on methane oxidation in the marsh soil of a typical subtropical estuary (Min River) in China. *Chemistry and Ecology*. 2018;34(7):610-23.

Huang B, Feng M, Li D, Yang Y. Antagonistic joint toxicity assessment of two current-use phthalates with waterborne copper in liver of *Carassius auratus* using biochemical biomarkers. *Ecotoxicology and environmental safety*. 2015;116:107-12.

Huang B, Li D, Yang Y. Joint Toxicity of Two Phthalates with Waterborne Copper to *Daphnia magna* and *Photobacterium phosphoreum*. *Bulletin of environmental contamination and toxicology*. 2016;97(3):380-6.

Huang B, Wei ZB, Yang LY, Pan K, Miao AJ. Combined Toxicity of Silver Nanoparticles with Hematite or Plastic Nanoparticles toward Two Freshwater Algae. *Environmental Science & Technology*. 2019;53(7):3871-9.

Huang H, Wang X, Shao Y, Chen D, Dai X, Wang L. QSAR for prediction of joint toxicity of substituted phenols to tadpoles (*Rana japonica*). *Bulletin of environmental contamination and toxicology*. 2003;71(6):1124-30.

Huang HY, Xu XG, Shi CF, Liu XS, Wang GX. Response of Taste and Odor Compounds to Elevated Cyanobacteria Biomass and Temperature. *Bulletin of Environmental Contamination and Toxicology*. 2018;101(2):272-8.

Huang QQ, Liu YY, Qin X, Zhao LJ, Liang XF, Xu YM. Selenite mitigates cadmium-induced oxidative stress and affects Cd uptake in rice seedlings under different water management systems. *Ecotoxicology and Environmental Safety*. 2019;168:486-94.

Huang WY, Liu F, Liu SS, Ge HL, Chen HH. Predicting mixture toxicity of seven phenolic compounds with similar and dissimilar action mechanisms to *Vibrio qinghaiensis* sp.nov.Q67. *Ecotoxicology and environmental safety*. 2011;74(6):1600-6.

Huang Y, Hu Y, Liu Y. Combined toxicity of copper and cadmium to six rice genotypes (*Oryza sativa* L.). *Journal of environmental sciences (China)*. 2009;21(5):647-53.

Huang YM, Chen HQ, Reinfelder JR, Liang XY, Sun CJ, Liu CP, et al. A transcriptomic (RNA-seq) analysis of genes responsive to both cadmium and arsenic stress in rice root. *Science of the Total Environment*. 2019;666:445-60.

Hubbs-Tait L, Nation JR, Krebs NF, Bellinger DC. Neurotoxins, Micronutrients, and Social Environments: Individual and Combined Effects on Children's Development. *Psychological science in the public interest : a journal of the American Psychological Society*. 2005;6(3):57-121.

Huff WE, Kubena LF, Harvey RB, Phillips TD. Efficacy of hydrated sodium calcium aluminosilicate to reduce the individual and combined toxicity of aflatoxin and ochratoxin A. *Poultry science*. 1992;71(1):64-9.

Huo TT, Dong FQ, Deng JJ, Zhang QB, Ye W, Zhang W, et al. In vitro genotoxicity of asbestos substitutes induced by coupled stimulation of dissolved high-valence ions and oxide radicals. *Environmental Science and Pollution Research*. 2018;25(23):22356-67.

Hussain S, Xie S, Abukabda A, Goldsmith WT, Mustafa JS, Nurkiewicz T, et al. Ultrafine Particle and Ozone Co-Exposure Significantly Aggravates Lung Inflammation and Systemic Vascular Responses. *American Journal of Respiratory and Critical Care Medicine*. 2019;199.

Huttunen K, Pelkonen J, Nielsen KF, Nuutinen U, Jussila J, Hirvonen M-R. Synergistic interaction in simultaneous exposure to *Streptomyces californicus* and *Stachybotrys chartarum*. *Environmental health perspectives*. 2004;112(6):659-65.

Huybrechts KF, Bateman BT, Desai RJ, Hernandez-Diaz S, Rough K, Mogun H, et al. Risk of neonatal drug withdrawal after intrauterine co-exposure to opioids and psychotropic medications: cohort study. *BMJ (Clinical research ed)*. 2017;358:j3326.

Ichihara G, Saito I, Kamijima M, Yu X, Shibata E, Toida M, et al. Urinary 2,5-hexanedione increases with potentiation of neurotoxicity in chronic coexposure to n-hexane and methyl ethyl ketone. *International archives of occupational and environmental health*. 1998;71(2):100-4.

Ichinose T, Sagai M. Combined exposure to NO₂, O₃ and H₂SO₄-aerosol and lung tumor formation in rats. *Toxicology*. 1992;74(2-3):173-84.

Igra AM, Vahter M, Raqib R, Kippler M. Early-Life Cadmium Exposure and Bone-Related Biomarkers: A Longitudinal Study in Children. *Environmental Health Perspectives*. 2019;127(3).

Ikeda M, Koizumi A, Kasahara M, Fujita H. Combined effects of n-hexane and toluene on norepinephrine and dopamine levels in rat brain tissues after long-term exposures. *Bulletin of environmental contamination and toxicology*. 1986;36(4):510-7.

Imran M, Sergeant O, Tete A, Gallais I, Chevanne M, Lagadic-Gossmann D, et al. Membrane Remodeling as a Key Player of the Hepatotoxicity Induced by Co-Exposure to Benzo a pyrene and Ethanol of Obese Zebrafish Larvae. *Biomolecules*. 2018;8(2).

Inamura K, Ninomiya H, Nomura K, Tsuchiya E, Satoh Y, Okumura S, et al. Combined effects of asbestos and cigarette smoke on the development of lung adenocarcinoma: different carcinogens may cause different genomic changes. *Oncology reports*. 2014;32(2):475-82.

Ingel FI, Bodiagin DA, Pereverzeva ER, Revazova IA. Pathophysiological effects of combined exposure to emotional stress and cyclophosphamide. *Biulleten' eksperimental'noi biologii i meditsiny*. 1997;123(5):506-9.

Ingenbleek L, Sulyok M, Adegboye A, Hossou SE, Kone AZ, Oyedele AD, et al. Regional Sub-Saharan Africa Total Diet Study in Benin, Cameroon, Mali and Nigeria Reveals the Presence of 164 Mycotoxins and Other Secondary Metabolites in Foods. *Toxins*. 2019;11(1).

Inkielewicz-Stepniak I, Santos-Martinez MJ, Medina C, Radomski MW. Pharmacological and toxicological effects of co-exposure of human gingival fibroblasts to silver nanoparticles and sodium fluoride. *International journal of nanomedicine*. 2014;9:1677-87.

Institoris L, Kovacs D, Kecskemeti-Kovacs I, Lukacs A, Szabo A, Lengyel Z, et al. Immunotoxicological investigation of subacute combined exposure with low doses of Pb, Hg and Cd in rats. *Acta biologica Hungarica*. 2006;57(4):433-9.

Institoris L, Papp A, Siroki O, Banerjee BD. Comparative investigation of behavioral, neurotoxicological, and immunotoxicological indices in detection of subacute combined exposure with methyl parathion and propoxur in rats. *Ecotoxicology and environmental safety*. 2004;57(3):270-7.

Institoris L, Siroki O, Desi I, Undeger U. Immunotoxicological examination of repeated dose combined exposure by dimethoate and two heavy metals in rats. *Human & experimental toxicology*. 1999;18(2):88-94.

Institoris L, Siroki O, Undeger U, Basaran N, Desi I. Immunotoxicological investigation of subacute combined exposure by permethrin and the heavy metals

arsenic(III) and mercury(II) in rats. *International immunopharmacology*. 2001;1(5):925-33.

Institoris L, Siroki O, Undeger U, Desi I, Nagymajtenyi L. Immunotoxicological effects of repeated combined exposure by cypermethrin and the heavy metals lead and cadmium in rats. *International journal of immunopharmacology*. 1999;21(11):735-43.

Iqbal G, Ahmed T. Co-exposure of metals and high fat diet causes aging like neuropathological changes in non-aged mice brain. *Brain Research Bulletin*. 2019;147:148-58.

Ird EA, Smirnova IO. Mammary tumors in female rats with combined exposure to nitrosoethylurea and sex hormones. *Voprosy onkologii*. 1981;27(12):43-6.

Ishaque AB, Johnson L, Gerald T, Boucaud D, Okoh J, Tchounwou PB. Assessment of individual and combined toxicities of four non-essential metals (As, Cd, Hg and Pb) in the microtox assay. *International journal of environmental research and public health*. 2006;3(1):118-20.

Ishidate M. COMBINED EFFECT OF CARCINOGENS AND CO-CARCINOGENS ON METABOLIC PROCESS. *Acta - Unio Internationalis Contra Cancrum*. 1964;20:909-14.

Islam Z, Amuzie CJ, Harkema JR, Pestka JJ. Neurotoxicity and inflammation in the nasal airways of mice exposed to the macrocyclic trichothecene mycotoxin roridin a: kinetics and potentiation by bacterial lipopolysaccharide coexposure. *Toxicological sciences : an official journal of the Society of Toxicology*. 2007;98(2):526-41.

Iswarya V, Bhuvaneshwari M, Alex SA, Iyer S, Chaudhuri G, Chandrasekaran PT, et al. Combined toxicity of two crystalline phases (anatase and rutile) of Titania nanoparticles towards freshwater microalgae: *Chlorella* sp. *Aquatic toxicology (Amsterdam, Netherlands)*. 2015;161:154-69.

Ivanova D, Vita G, Wood R, Lausset C, Dumitru A, Krause K, et al. Carbon mitigation in domains of high consumer lock-in. *Global Environmental Change-Human and Policy Dimensions*. 2018;52:117-30.

Iwasaki Y, Brinkman SF. Application of a generalized linear mixed model to analyze mixture toxicity: survival of brown trout affected by copper and zinc. *Environmental toxicology and chemistry*. 2015;34(4):816-20.

Iwasaki Y, Gauthier P. Concentration addition and response addition to analyze mixture toxicity: Is it worth testing? *Environmental toxicology and chemistry*. 2016;35(3):526-7.

Iwata M, Takeuchi Y, Hisanaga N, Ono Y. Changes of n-hexane neurotoxicity and its urinary metabolites by long-term co-exposure with MEK or toluene. *International archives of occupational and environmental health*. 1984;54(4):273-81.

Iyaniwura TT. Mammalian toxicity and combined exposure to pesticides. *Veterinary and human toxicology*. 1990;32(1):58-62.

Iyaniwura TT. Pharmacological interaction and combined toxicity of exposure to environmental chemicals. *Reviews on environmental health*. 1989;8(1-4):165-70.

Jacob CC, Reimschuessel R, Von Tungeln LS, Olson GR, Warbritton AR, Hattan DG, et al. Dose-response assessment of nephrotoxicity from a 7-day combined exposure to melamine and cyanuric acid in F344 rats. *Toxicological sciences : an official journal of the Society of Toxicology*. 2011;119(2):391-7.

Jacobsen PR, Christiansen S, Boberg J, Nellemann C, Hass U. Combined exposure to endocrine disrupting pesticides impairs parturition, causes pup mortality and affects sexual differentiation in rats. *International journal of andrology*. 2010;33(2):434-42.

Jacquín L, Gandar A, Aguirre-Smith M, Perrault A, Le Henaff M, De Jong L, et al. High temperature aggravates the effects of pesticides in goldfish. *Ecotoxicology and Environmental Safety*. 2019;172:255-64.

Jagels A, Lindemann V, Ulrich S, Gottschalk C, Cramer B, Hubner F, et al. Exploring Secondary Metabolite Profiles of *Stachybotrys* spp. by LC-MS/MS. *Toxins*. 2019;11(3).

Jager T, Gudmundsdottir EM, Cedergreen N. Dynamic modeling of sublethal mixture toxicity in the nematode *Caenorhabditis elegans*. *Environmental science & technology*. 2014;48(12):7026-33.

Jager T, Vandenbrouck T, Baas J, De Coen WM, Kooijman SALM. A biology-based approach for mixture toxicity of multiple endpoints over the life cycle. *Ecotoxicology (London, England)*. 2010;19(2):351-61.

Jain A, Agrawal S, Flora SJS. Arsenic and nicotine co-exposure lead to some synergistic effects on oxidative stress and apoptotic markers in young rat blood, liver, kidneys and brain. *Toxicology reports*. 2015;2:1334-46.

Jain RB. Synergistic impact of co-exposures to toxic metals cadmium, lead, and mercury along with perfluoroalkyl substances on the healthy kidney function. *Environmental Research*. 2019;169:342-7.

Jain S, Rachamalla M, Kulkarni A, Kaur J, Tikoo K. Pulmonary fibrotic response to inhalation of ZnO nanoparticles and toluene co-exposure through directed flow nose only exposure chamber. *Inhalation toxicology*. 2013;25(13):703-13.

Jajte J, Stetkiewicz J, Wronska-Nofer T. Combined exposure to m-xylene and ethanol: oxidative stress in the rat liver. *International journal of occupational medicine and environmental health*. 2003;16(4):345-50.

Jakubowski M, Kostrzewski P. Excretion of methylbenzoic acid in urine as a result of single and combined exposure to m-xylene. *Polish journal of occupational medicine*. 1989;2(3):238-47.

Jamesdaniel S, Rosati R, Westrick J, Ruden DM. Chronic lead exposure induces cochlear oxidative stress and potentiates noise-induced hearing loss. *Toxicology Letters*. 2018;292:175-80.

Jang J, Lee DS. Magnetite nanoparticles supported on organically modified montmorillonite for adsorptive removal of iodide from aqueous solution: Optimization using response surface methodology. *Science of the Total Environment*. 2018;615:549-57.

Jantzen K, Jensen A, Kermanizadeh A, Elholm G, Sigsgaard T, Moller P, et al. Inhalation of House Dust and Ozone Alters Systemic Levels of Endothelial Progenitor Cells, Oxidative Stress, and Inflammation in Elderly Subjects. *Toxicological Sciences*. 2018;163(2):353-63.

Janulewicz P, Krengel M, Quinn E, Heeren T, Toomey R, Killiany R, et al. The Multiple Hit Hypothesis for Gulf War Illness: Self-Reported Chemical/Biological Weapons Exposure and Mild Traumatic Brain Injury. *Brain Sciences*. 2018;8(11).

Jayasumana C, Gunatilake S, Siribaddana S. Simultaneous exposure to multiple heavy metals and glyphosate may contribute to Sri Lankan agricultural nephropathy. *BMC nephrology*. 2015;16:103.

Jeddi MZ, Gorji ME, Rietjens I, Louisse J, de Bruin YB, Liska R. Biomonitoring and Subsequent Risk Assessment of Combined Exposure to Phthalates in Iranian Children and Adolescents. *International Journal of Environmental Research and Public Health*. 2018;15(11).

Jeelani N, Yang W, Qiao YJ, Li JJ, An SQ, Leng X. Individual and combined effects of cadmium and polycyclic aromatic hydrocarbons on the phytoremediation potential of *Xanthium sibiricum* in co-contaminated soil. *International Journal of Phytoremediation*. 2018;20(8):773-9.

Jensen FB, Koldkjaer P, Bach A. Anion uptake and acid-base and ionic effects during isolated and combined exposure to hypercapnia and nitrite in the freshwater crayfish, *Astacus astacus*. *Journal of comparative physiology B, Biochemical, systemic, and environmental physiology*. 2000;170(7):489-95.

Jensen J, Sverdrup LE. Joint toxicity of linear alkylbenzene sulfonates and pyrene on *Folsomia fimetaria*. *Ecotoxicology and environmental safety*. 2002;52(1):75-81.

Jeong S, Son E, Kim Y, Park J, Kyung S. Effects of Antioxidants on Inflammatory and Oxidative Stress Responses of Human Bronchial Epithelial Cells Co-Exposed to Particulate Matter and Cigarette Smoke Extract. *American Journal of Respiratory and Critical Care Medicine*. 2019;199.

Jeong YJ, Son Y, Han NK, Choi HD, Pack JK, Kim N, et al. Impact of Long-Term RF-EMF on Oxidative Stress and Neuroinflammation in Aging Brains of C57BL/6 Mice. *International Journal of Molecular Sciences*. 2018;19(7).

Jhamtani RC, Shukla S, Sivaperumal P, Dahiya MS, Agarwal R. Impact of co-exposure of aldrin and titanium dioxide nanoparticles at biochemical and molecular levels in Zebrafish. *Environmental Toxicology and Pharmacology*. 2018;58:141-55.

Jho EH, An J, Nam K. Extended biotic ligand model for prediction of mixture toxicity of Cd and Pb using single metal toxicity data. *Environmental toxicology and chemistry*. 2011;30(7):1697-703.

Ji J, Wang QY, Wu H, Xia S, Guo HY, Blazenovic I, et al. Insights into cellular metabolic pathways of the combined toxicity responses of Caco-2 cells exposed to deoxynivalenol, zearalenone and Aflatoxin B-1. *Food and Chemical Toxicology*. 2019;126:106-12.

Ji J, Zhu P, Pi F, Sun C, Jiang H, Sun J, et al. GC-TOF/MS-based metabolomic strategy for combined toxicity effects of deoxynivalenol and zearalenone on murine macrophage ANA-1 cells. *Toxicon : official journal of the International Society on Toxinology*. 2016;120:175-84.

Ji PY, Li ZY, Wang H, Dong JT, Li XJ, Yi HL. Arsenic and sulfur dioxide co-exposure induce renal injury via activation of the NF-kappa B and caspase signaling pathway. *Chemosphere*. 2019;224:280-8.

Jia W, Wang C, Ma C, Wang J, Sun H. Element uptake and physiological responses of *Lactuca sativa* upon co-exposures to tourmaline and dissolved humic acids. *Environmental science and pollution research international*. 2018.

Jia WL, Wang CP, Ma CX, Wang JC, Sun HW. Element uptake and physiological responses of *Lactuca sativa* upon co-exposures to tourmaline and dissolved humic acids. *Environmental Science and Pollution Research*. 2018;25(16):15998-6008.

Jiang E, Zhu L, Zhao Y, Zhao G, Bao L, Chen S, et al. Enhanced radiation damage in irradiated and non-irradiated bystander regions by co-exposure to myosmine. *Mutation research*. 2009;672(1):60-4.

Jiang N, Ying GL, Yetisen AK, Montelongo Y, Shen L, Xiao YX, et al. A bilayered nanoshell for durable protection of single yeast cells against multiple, simultaneous hostile stimuli. *Chemical Science*. 2018;9(21).

Jiang R, Wang ME, Chen WP, Li XZ. Ecological risk evaluation of combined pollution of herbicide siduron and heavy metals in soils. *Science of the Total Environment*. 2018;626:1047-56.

Jiang SL, Shang MT, Mu K, Jiang N, Wen HY, Wang R, et al. In vitro and in vivo toxic effects and inflammatory responses induced by carboxylated black carbon-lead complex exposure. *Ecotoxicology and Environmental Safety*. 2018;165:484-94.

Jiang W, Lu C, Miao YF, Xiang YG, Chen L, Deng QH. Outdoor particulate air pollution and indoor renovation associated with childhood pneumonia in China. *Atmospheric Environment*. 2018;174:76-81.

Jiang X, Chen H-Q, Cui Z-H, Yin L, Zhang W-L, Liu W-B, et al. Low-dose and combined effects of oral exposure to bisphenol A and diethylstilbestrol on the male reproductive system in adult Sprague-Dawley rats. *Environmental toxicology and pharmacology*. 2016;43:94-102.

Jiang XG, Cao Y, Jorgensen LV, Strobel BW, Hansen HCB, Cedergreen N. Where does the toxicity come from in saponin extract? *Chemosphere*. 2018;204:243-50.

Jimeno-Romero A, Oron M, Cajaraville MP, Soto M, Marigomez I. Nanoparticle size and combined toxicity of TiO₂ and DSLS (surfactant) contribute

to lysosomal responses in digestive cells of mussels exposed to TiO₂ nanoparticles. *Nanotoxicology*. 2016;10(8):1168-76.

Jin H, Wang C, Shi J, Chen L. Evaluation on joint toxicity of chlorinated anilines and cadmium to *Photobacterium phosphoreum* and QSAR analysis. *Journal of hazardous materials*. 2014;279:156-62.

Jin L, Xie JW, Wong CKC, Chan SKY, Abbaszade G, Schnelle-Kreis J, et al. Contributions of City-Specific Fine Particulate Matter (PM_{2.5}) to Differential In Vitro Oxidative Stress and Toxicity Implications between Beijing and Guangzhou of China. *Environmental Science & Technology*. 2019;53(5):2881-91.

Jin M, Ji XN, Zhang BY, Sheng WL, Wang RC, Liu KC. Synergistic effects of Pb and repeated heat pulse on developmental neurotoxicity in zebrafish. *Ecotoxicology and Environmental Safety*. 2019;172:460-70.

Jin YB, Choi H-D, Kim BC, Pack J-K, Kim N, Lee Y-S. Effects of simultaneous combined exposure to CDMA and WCDMA electromagnetic fields on serum hormone levels in rats. *Journal of radiation research*. 2013;54(3):430-7.

Jin Y-B, Lee H-J, Seon Lee J, Pack J-K, Kim N, Lee Y-S. One-year, simultaneous combined exposure of CDMA and WCDMA radiofrequency electromagnetic fields to rats. *International journal of radiation biology*. 2011;87(4):416-23.

Jin YB, Pyun B-J, Jin H, Choi H-D, Pack J-K, Kim N, et al. Effects of simultaneous combined exposure to CDMA and WCDMA electromagnetic field on immune functions in rats. *International journal of radiation biology*. 2012;88(11):814-21.

Jin Z, Zong C, Jiang B, Zhou Z, Tong J, Cao Y. The effect of combined exposure of 900 MHz radiofrequency fields and doxorubicin in HL-60 cells. *PloS one*. 2012;7(9):e46102.

Jo H-J, Son J, Cho K, Jung J. Combined effects of water quality parameters on mixture toxicity of copper and chromium toward *Daphnia magna*. *Chemosphere*. 2010;81(10):1301-7.

Jocsak G, Kiss DS, Toth I, Goszleth G, Barthá T, Frenyo LV, et al. Comparison of Individual and Combined Effects of Four Endocrine Disruptors on Estrogen Receptor Beta Transcription in Cerebellar Cell Culture: The Modulatory Role of Estradiol and Triiodo-Thyronine. *International journal of environmental research and public health*. 2016;13(6).

Johansson A, Curstedt T, Jarstrand C, Camner P. Alveolar macrophages and lung lesions after combined exposure to nickel, cobalt, and trivalent chromium. *Environmental health perspectives*. 1992;97:215-9.

Johansson A, Curstedt T, Rasool O, Jarstrand C, Camner P. Rabbit lung after combined exposure to soluble cobalt and trivalent chromium. *Environmental research*. 1992;58(1):80-96.

Johansson A, Curstedt T, Robertson B, Camner P. Lung lesions after experimental combined exposure to nickel and trivalent chromium. *Environmental research*. 1989;50(1):103-19.

Johansson A, Wiernik A, Lundborg M, Jarstrand C, Camner P. Alveolar macrophages in rabbits after combined exposure to nickel and trivalent chromium. *Environmental research*. 1988;46(2):120-32.

Johnson JV, Hall EM, Theorell T. Combined effects of job strain and social isolation on cardiovascular disease morbidity and mortality in a random sample of the Swedish male working population. *Scandinavian journal of work, environment & health*. 1989;15(4):271-9.

Joly V, Bergeron Y, Bergeron MG, Carbon C. Endotoxin-tobramycin additive toxicity on renal proximal tubular cells in culture. *Antimicrobial agents and chemotherapy*. 1991;35(2):351-7.

Jones BM, Farquharson LM, Baughman CA, Buzard RM, Arp CD, Grosse G, et al. A decade of remotely sensed observations highlight complex processes linked to coastal permafrost bluff erosion in the Arctic. *Environmental Research Letters*. 2018;13(11).

Jones MC, Cheung WWL. Using fuzzy logic to determine the vulnerability of marine species to climate change. *Global Change Biology*. 2018;24(2):E719-E31.

Jorgensen L, Jenssen T, Heuch I, Jacobsen BK. The combined effect of albuminuria and inflammation on all-cause and cardiovascular mortality in nondiabetic persons. *Journal of internal medicine*. 2008;264(5):493-501.

Ju Z, Liu SS, Xu YQ, Li K. Combined Toxicity of 2,4-Dichlorophenoxyacetic Acid and Its Metabolites 2,4-Dichlorophenol (2,4-DCP) on Two Nontarget Organisms. *Acs Omega*. 2019;4(1):1669-77.

Juan-Garcia A, Taroncher M, Font G, Ruiz MJ. Micronucleus induction and cell cycle alterations produced by deoxynivalenol and its acetylated derivatives in

individual and combined exposure on HepG2 cells. *Food and Chemical Toxicology*. 2018;118:719-25.

Jung DS, Jung GH, Lee EH, Park HR, Kim JH, Kim KB, et al. Effect of Combined Exposure to EDTA and Zinc Pyrithione on Pyrithione Absorption in Rats. *Toxicological Research*. 2019;35(2):155-+.

Jureczko M, Przystas W. Ecotoxicity risk of presence of two cytostatic drugs: Bleomycin and vincristine and their binary mixture in aquatic environment. *Ecotoxicology and Environmental Safety*. 2019;172:210-5.

Kabakova NM, Videnskii VG. Fast repair in diploid yeast cells after combined exposure to ionizing radiation with different LET. *Radiatsionnaia biologiiia, radioecologiiia*. 1994;34(3):336-41.

Kagan IS, Voitenko GA, Pan'shina TN, Voronina VM, Kokshareva NV. Combined toxicological and hygienic study of the organophosphate insecto-acaricide actellic. *Gigiena i sanitariiia*. 1983(6):32-5.

Kahl VFS, Simon D, de Souza MR, da Rosa VH, Nicolau C, Da Silva FR, et al. Base excision repair (OGG1 and XRCC1) and metabolism (PON1) gene polymorphisms act on modulation of DNA damage and immune parameters in tobacco farmers. *Mutation Research-Genetic Toxicology and Environmental Mutagenesis*. 2018;836:9-18.

Kaji T, Suzuki M, Yamamoto C, Mishima A, Sakamoto M, Kozuka H. Severe damage of cultured vascular endothelial cell monolayer after simultaneous exposure to cadmium and lead. *Archives of environmental contamination and toxicology*. 1995;28(2):168-72.

Takei M, Sakae T, Yoshikawa M. Combined effects of estrogen deficiency and cadmium exposure on calcified hard tissues: animal model relating to itai-itai disease in postmenopausal women. *Proceedings of the Japan Academy Series B, Physical and biological sciences*. 2013;89(7):340-7.

Kakinuma S, Nishimura M, Amasaki Y, Takada M, Yamauchi K, Sudo S, et al. Combined exposure to X-irradiation followed by N-ethyl-N-nitrosourea treatment alters the frequency and spectrum of Ikaros point mutations in murine T-cell lymphoma. *Mutation research*. 2012;737(1-2):43-50.

Kakosy T, Horvath F. Appearance of the scalenus syndrome as a combined effect of a variation of the 1st rib and vibration damage. *Zeitschrift fur Orthopadie und ihre Grenzgebiete*. 1969;106(1):98-102.

Kal'chenko VA, Lotareva OV, Spirin DA, Karaban RT, Mal'tseva LN. Effects of combined exposure to gamma radiation and sulfur dioxide or N-methyl-N'-nitro-N-nitrosoguanidine on bacteria and higher plants. *Izvestiia Akademii nauk SSSR Serii biologicheskaya*. 1988(6):908-14.

Kalina OV, Il'nitskaia AV. Formation of a protective cellular reaction of the respiratory tract after combined exposure to silicon dioxide and ozone. *Gigiena truda i professional'nye zabolvaniia*. 1984(12):29-33.

Kalversiep G, Hamacher J. Toxicity and combination toxicity of cardiac glycosides at an optimal molar titer and long survival time. *Naunyn-Schmiedeberg's Archiv für Pharmakologie*. 1970;266(4):366-7.

Kamo M, Iwasaki Y, Yokomizo H. Much ado about interaction: A combination of linear processes yields non-linear toxic effects in chemical mixtures. *Chemosphere*. 2019;219:89-94.

Kane CM, Pierce DR, Nyamweya NN, Yang H, Kasmi Y, Mosby R, et al. Nutritional factors modify the inhibition of CNS development by combined exposure to methadone and ethanol in neonatal rats. *Pharmacology, biochemistry, and behavior*. 1997;56(3):399-407.

Kang HJ, Jung Y, Kwon JH. Changes in ecotoxicity of naphthalene and alkylated naphthalenes during photodegradation in water. *Chemosphere*. 2019;222:656-64.

Kang J, Duan JF, Song J, Luo C, Liu H, Li BZ, et al. Exposure to a combination of formaldehyde and DINP aggravated asthma-like pathology through oxidative stress and NF-kappa B activation. *Toxicology*. 2018;404:49-58.

Kang L, Jia L, Han P, Zhang W, Ma Y, Fu L, et al. Combined Effect of Obesity and Mobility Limitation with Incidence of Type 2 Diabetes and Mortality in Chinese Elderly. *Rejuvenation research*. 2017;20(5):375-82.

Kanwal Q, Qadir A, Amina, Asmatullah, Iqbal HH, Munir B. Healing potential of *Adiantum capillus-veneris* L. plant extract on bisphenol A-induced hepatic toxicity in male albino rats. *Environmental Science and Pollution Research*. 2018;25(12):11884-92.

Kappelman MD, Lange A, Randell RL, Basta PV, Sandler RS, Laugesen K, et al. 1 Feasibility of salivary DNA collection in a population-based case-control study: a pilot study of pediatric Crohn's disease. *Clinical Epidemiology*. 2018;10:215-22.

Kappey F. THE EFFECT OF 2-BENZYLIMIDAZOLINE AND NORADRENALIN ON OXYGEN CONSUMPTION IN DOGS DURING SIMULTANEOUS EXPOSURE TO HEAT STRESS. *Arzneimittel-Forschung*. 1964;14:169-71.

Kar S, Ghosh S, Leszczynski J. Investigating ligand and structure-based modeling followed by mixture toxicity prediction of per-and polyfluoroalkyl substances: A virtual screening approach. *Abstracts of Papers of the American Chemical Society*. 2018;255.

Karakulov RK, Poverennyi AM, Ershov FI, Popov GA, Pelevina II. Effect of combined exposure to an interferon inducer, irradiation and 5-fluorouracil on sarcoma 37 in mice. *Voprosy onkologii*. 1984;30(2):69-76.

Karaouzas I, Smeti E, Vourka A, Vardakas L, Mentzafou A, Tornes E, et al. Assessing the ecological effects of water stress and pollution in a temporary river - Implications for water management. *Science of the Total Environment*. 2018;618:1591-604.

Kargar S, Khoei S, Khoei S, Shirvalilou S, Mahdavi SR. Evaluation of the combined effect of NIR laser and ionizing radiation on cellular damages induced by IUdR-loaded PLGA-coated Nano-graphene oxide. *Photodiagnosis and photodynamic therapy*. 2018;21:91-7.

Karri V, Kumar V, Ramos D, Oliveira E, Schuhmacher M. An in vitro cytotoxic approach to assess the toxicity of heavy metals and their binary mixtures on hippocampal HT-22 cell line. *Toxicology Letters*. 2018;282:25-36.

Kasparow AA. Various aspects of hygienic standardization in the complex and combined effects of chemical compounds and their combinations with other harmful environmental factors. *Medycyna pracy*. 1985;36(5):309-15.

Katsikantami I, Colosio C, Alegakis A, Tzatzarakis MN, Vakonaki E, Rizos AK, et al. Estimation of daily intake and risk assessment of organophosphorus pesticides based on biomonitoring data - The internal exposure approach. *Food and Chemical Toxicology*. 2019;123:57-71.

Katsnelson BA, Panov VG, Minigaliyeva IA, Varaksin AN, Privalova LI, Slyshkina TV, et al. Further development of the theory and mathematical description of combined toxicity: An approach to classifying types of action of three-factorial combinations (a case study of manganese-chromium-nickel subchronic intoxication). *Toxicology*. 2015;334:33-44.

Katsnelson BA, Panov VG, Varaksin AN, Minigalieva IA, Privalova LI, Sutunkova MP. Changes in the Dose-Response Relationship of One Toxicant Under Simultaneous Exposure to Another Toxicant. *Dose-response : a publication of International Hormesis Society*. 2016;14(4):1559325816672935.

Kavesh NG, Holzman RS, Seidlin M. The combined toxicity of azidothymidine and antimycobacterial agents. A retrospective study. *The American review of respiratory disease*. 1989;139(5):1094-7.

Kavitha B, Reddy PVL, Kim B, Lee SS, Pandey SK, Kim KH. Benefits and limitations of biochar amendment in agricultural soils: A review. *Journal of Environmental Management*. 2018;227:146-54.

Kawaguchi I, Doi M, Kakinuma S, Shimada Y. Combined effect of multiple carcinogens and synergy index. *Journal of theoretical biology*. 2006;243(1):143-51.

Kawahara S, Hrai N, Arai M, Tatarazako N. The effect of in vivo co-exposure to estrone and AhR-ligands on estrogenic effect to vitellogenin production and EROD activity. *Environmental toxicology and pharmacology*. 2009;27(1):139-43.

Kelly MR, Cohen RA. The Effects of an Herbicide and Antibiotic Mixture on Aquatic Primary Producers and Grazers. *Bulletin of Environmental Contamination and Toxicology*. 2018;101(5):556-61.

Khan A, Chatterjee S. Coastal Risk: Concepts and Background. *Coastal Risk Assessment: a Comprehensive Framework for the Bay of Bengal*. SpringerBriefs in Oceanography 2018. p. 1-16.

Khan AM, Raina R, Dubey N, Verma PK. Effect of deltamethrin and fluoride co-exposure on the brain antioxidant status and cholinesterase activity in Wistar rats. *Drug and Chemical Toxicology*. 2018;41(2):123-7.

Khan H, Verma Y, Rana SVS. Oxidative stress induced by co-exposure to arsenic and fluoride in Wistar rat. *Cancer Medicine*. 2018;7:33-.

Khan J, Ketzel M, Kakosimos K, Sorensen M, Jensen SS. Road traffic air and noise pollution exposure assessment - A review of tools and techniques. *Science of the Total Environment*. 2018;634:661-76.

Kharlyngdoh JB, Pradhan A, Olsson P-E. Androgen receptor modulation following combination exposure to brominated flame-retardants. *Scientific reports*. 2018;8(1):4843.

Kharlyngdoh JB, Pradhan A, Olsson PE. Androgen receptor modulation following combination exposure to brominated flame-retardants. *Scientific Reports*. 2018;8.

Khoei S, Delfan S, Neshasteh-Riz A, Mahdavi SR. Evaluation of the Combined Effect of 2ME2 and (60)Co on the Inducement of DNA Damage by IUdR in a Spheroid Model of the U87MG Glioblastoma Cancer Cell Line Using Alkaline Comet Assay. *Cell journal*. 2011;13(2):83-90.

Khpalwak W, Abdel-dayenm SM, Sakugawa H. Individual and combined effects of fluoranthene, phenanthrene, mannitol and sulfuric acid on marigold (*Calendula officinalis*). *Ecotoxicology and Environmental Safety*. 2018;148:834-41.

Kiefer F, Wiebel FJ. V79 Chinese hamster cells express cytochrome P-450 activity after simultaneous exposure to polycyclic aromatic hydrocarbons and aminophylline. *Toxicology letters*. 1989;48(3):265-73.

Kienast K, Riechelmann H, Knorst M, Haffner B, Muller-Quernheim J, Schellenberg J, et al. Combined exposures of human ciliated cells to different concentrations of sulfur dioxide and nitrogen dioxide. *European journal of medical research*. 1996;1(11):533-6.

Kilian E, Delport R, Bornman MS, de Jager C. Simultaneous exposure to low concentrations of dichlorodiphenyltrichloroethane, deltamethrin, nonylphenol and phytoestrogens has negative effects on the reproductive parameters in male Sprague-Dawley rats. *Andrologia*. 2007;39(4):128-35.

Kim BG, Lee PH, Lee SH, Hong J, Jang AS. Claudins, VEGF, Nrf2, Keap1, and Nonspecific Airway Hyper-Reactivity Are Increased in Mice Co-Exposed to Allergen and Acrolein. *Chemical Research in Toxicology*. 2019;32(1):139-45.

Kim D, Chae Y, An Y-J. Mixture Toxicity of Nickel and Microplastics with Different Functional Groups on *Daphnia magna*. *Environmental science & technology*. 2017;51(21):12852-8.

Kim HR, Kim B, Jo BS, Lee JW. Silica exposure and work-relatedness evaluation for occupational cancer in Korea. *Annals of Occupational and Environmental Medicine*. 2018;30.

Kim I, Lee Y, Kim SD. Cytotoxicity induced by the mixture components of nickel and poly aromatic hydrocarbons. *Environmental Geochemistry and Health*. 2019;41(1):391-400.

Kim J, Kim S, Schaumann GE. Development of QSAR-based two-stage prediction model for estimating mixture toxicity. SAR and QSAR in environmental research. 2013;24(10):841-61.

Kim J, Kim S. State of the art in the application of QSAR techniques for predicting mixture toxicity in environmental risk assessment. SAR and QSAR in environmental research. 2015;26(1):41-59.

Kim J, Park H, Ha E, Jung T, Paik N, Yang S. Combined effects of noise and mixed solvents exposure on the hearing function among workers in the aviation industry. Industrial health. 2005;43(3):567-73.

Kim JH, Seok K. Combined Assessment of Preschool Childrens' Exposure to Substances in Household Products. International Journal of Environmental Research and Public Health. 2019;16(5).

Kim JP, Park JG, Lee MD, Han MD, Park ST, Lee BH, et al. Co-carcinogenic effects of several Korean foods on gastric cancer induced by N-methyl-N'-nitro-N-nitrosoguanidine in rats. The Japanese journal of surgery. 1985;15(6):427-37.

Kim JY, Shin JS, Lim MS, Choi HG, Kim SK, Kang HT, et al. Relationship between simultaneous exposure to ergonomic risk factors and work-related lower back pain: a cross-sectional study based on the fourth Korean working conditions survey. Annals of Occupational and Environmental Medicine. 2018;30.

Kim K, Jeon HJ, Choi SD, Tsang DCW, Oleszczuk P, Ok YS, et al. Combined toxicity of endosulfan and phenanthrene mixtures and induced molecular changes in adult Zebrafish (*Danio rerio*). Chemosphere. 2018;194:30-41.

Kim K, Jeon H-J, Choi S-D, Tsang DCW, Oleszczuk P, Ok YS, et al. Combined toxicity of endosulfan and phenanthrene mixtures and induced molecular changes in adult Zebrafish (*Danio rerio*). Chemosphere. 2018;194:30-41.

Kim K, Kim J, Hyun S. Soil attenuation of the leaching potential of mine-related metallic elements (Zn, As, and Cd) under different leachate solute compositions. Journal of Environmental Management. 2018;222:402-8.

Kim K, Wang CH, Ok YS, Lee SE. Heart developmental toxicity by carbon black waste generated from oil refinery on zebrafish embryos (*Danio rerio*): Combined toxicity on heart function by nickel and vanadium. Journal of Hazardous Materials. 2019;363:127-37.

Kim KT, Lee YG, Kim SD. Combined toxicity of copper and phenol derivatives to *Daphnia magna*: effect of complexation reaction. *Environment international*. 2006;32(4):487-92.

Kim K-W, Won YL, Park DJ, Kim YS, Jin ES, Lee SK. Combined Toxic Effects of Polar and Nonpolar Chemicals on Human Hepatocytes (HepG2) Cells by Quantitative Property-Activity Relationship Modeling. *Toxicological research*. 2016;32(4):337-43.

Kim NH, Cho HJ, Kim YJ, Cho MJ, Choi HY, Eun CR, et al. Combined effect of high-normal blood pressure and low HDL cholesterol on mortality in an elderly Korean population: the South-West Seoul (SWS) study. *American journal of hypertension*. 2011;24(8):918-23.

Kim NH, Kim TJ, Kim NH, Choi KM, Baik SH, Choi DS, et al. Relative and combined effects of socioeconomic status and diabetes on mortality: A nationwide cohort study. *Medicine*. 2016;95(30):e4403.

Kim Y, Ha E-H, Park H, Ha M, Kim Y, Hong Y-C, et al. Prenatal lead and cadmium co-exposure and infant neurodevelopment at 6 months of age: the Mothers and Children's Environmental Health (MOCEH) study. *Neurotoxicology*. 2013;35:15-22.

Kim Y, Kim B-N, Hong Y-C, Shin M-S, Yoo H-J, Kim J-W, et al. Co-exposure to environmental lead and manganese affects the intelligence of school-aged children. *Neurotoxicology*. 2009;30(4):564-71.

Kimizuka G, Azuma M, Ishibashi M, Shinozaki K, Hayashi Y. Co-carcinogenic effect of chrysotile and amosite asbestos with benzo(a)pyrene in the lung of hamsters. *Acta pathologica japonica*. 1993;43(4):149-53.

Kimizuka G, Ohwada H, Hayashi Y. Co-carcinogenic effect of asbestos and benzo(a)pyrene in the lung of hamster. *Acta pathologica japonica*. 1987;37(3):465-74.

Kimsa-Dudek M, Synowiec-Wojtarowicz A, Derewniuk M, Gawron S, Paul-Samojedny M, Kruszniewska-Rajs C, et al. Impact of fluoride and a static magnetic field on the gene expression that is associated with the antioxidant defense system of human fibroblasts. *Chemico-Biological Interactions*. 2018;287:13-9.

Kimura Y, Suto S, Tatsuka M. Evaluation of carcinogenic/co-carcinogenic activity of chikusaku-eki, a bamboo charcoal by-product used as a folk remedy, in BALB/c 3T3 cells. *Biological & pharmaceutical bulletin*. 2002;25(8):1026-9.

Kinoshita H, Ijiri I, Ameno S, Tanaka N, Kubota T, Tsujinaka M, et al. Combined toxicity of methanol and formic acid: two cases of methanol poisoning. *International journal of legal medicine*. 1998;111(6):334-5.

Kinoshita H, Nishiguchi M, Kasuda S, Takahashi M, Ouchi H, Minami T, et al. A fatal case due to combined toxicity of psychotropic drugs. *Forensic science international*. 2008;181(1-3):e7-8.

Kinsella AR. Elimination of metabolic co-operation and the induction of sister chromatid exchanges are not properties common to all promoting or co-carcinogenic agents. *Carcinogenesis*. 1982;3(5):499-503.

Kirkov V, Vantova K. Autonomic nervous manifestations in combined exposure to lead and manganese. *Problemi na khigienata*. 1976;2:99-105.

Kirkov V. Autonomic nervous changes in combined exposure to lead and arsenic. *Problemi na khigienata*. 1976;2:107-12.

Kirsch-Volders M, Lison D. Re: Hengstler, J.G., Bolm-Auorff, U., Faldum, A., Janssen, K., Reifenrath, M., Gotte, W., Jung, D., Mayer-Popken, O., Fuchs, J., Gebhard, S., Bienfait, H.G., Schlink, K., Dietrich, C., Faust, D., Epe, B. and Oesch, F. Occupational exposure to heavy metals: DNA damage induction and DNA repair inhibition prove co-exposures to cadmium, cobalt and lead as more dangerous than hitherto expected. *Carcinogenesis*, 2003, 24, 63-73. *Carcinogenesis*. 2003;24(11):1853-4; author reply 5-7.

Klaverkamp JF, Macdonald WA, Lillie WR, Lutz A. Joint toxicity of mercury and selenium in salmonid eggs. *Archives of environmental contamination and toxicology*. 1983;12(4):415-9.

Klimarev SI, Siniak IE. Water disinfection by the combined exposure to super-high frequency energy and available chlorine produced during water electrolysis. *Aviakosmicheskaya i ekologicheskaya meditsina = Aerospace and environmental medicine*. 2014;48(2):48-51.

Klokov DI, Zaichkina SI, Aptikaeva GF, Akhmadieva AK, Rozanova OM, Ganassi EE. Induction of cytogenetic damage to rat bone marrow cells by combined exposure to chronic and acute gamma radiation. *Genetika*. 1997;33(6):855-7.

Knapen D, Angrish MM, Fortin MC, Katsiadaki I, Leonard M, Margiotta-Casaluci L, et al. Adverse outcome pathway networks I: Development and applications. *Environmental Toxicology and Chemistry*. 2018;37(6):1723-33.

Knauert S, Escher B, Singer H, Hollender J, Knauer K. Mixture toxicity of three photosystem II inhibitors (atrazine, isoproturon, and diuron) toward photosynthesis of freshwater phytoplankton studied in outdoor mesocosms. *Environmental science & technology*. 2008;42(17):6424-30.

Knebel C, Heise T, Zanger UM, Lampen A, Marx-Stoelting P, Braeuning A. The azole fungicide tebuconazole affects human CYP1A1 and CYP1A2 expression by an aryl hydrocarbon receptor-dependent pathway. *Food and Chemical Toxicology*. 2019;123:481-91.

Knebel C, Kebben J, Eberini I, Palazzolo L, Hammer HS, Sussmuth RD, et al. Propiconazole is an activator of AHR and causes concentration additive effects with an established AHR ligand. *Archives of Toxicology*. 2018;92(12):3471-86.

Knebel C, Neeb J, Zahn E, Schmidt F, Carazo A, Holas O, et al. Unexpected Effects of Propiconazole, Tebuconazole, and Their Mixture on the Receptors CAR and PXR in Human Liver Cells. *Toxicological Sciences*. 2018;163(1):170-81.

Kobayashi T, Shiki Y, Meyrick B, Burr IM, Newman JH. Simultaneous exposure of sheep to endotoxin and 100% oxygen. *The American review of respiratory disease*. 1991;144(3 Pt 1):600-5.

Kobler UG, Wuest A, Schmid M. Combined effects of pumped-storage operation and climate change on thermal structure and water quality. *Climatic Change*. 2019;152(3-4):413-29.

Kobya M, Sik E, Demirbas E, Goren AY, Oncel MS. OPTIMIZATION OF SOME CATIONS FOR REMOVAL OF ARSENIC FROM GROUNDWATER BY ELECTROCOAGULATION PROCESS. *Environmental Engineering and Management Journal*. 2018;17(5):1079-93.

Kodros JK, Carter E, Brauer M, Volckens J, Bilsback KR, L'Orange C, et al. Quantifying the Contribution to Uncertainty in Mortality Attributed to Household, Ambient, and Joint Exposure to PM_{2.5} From Residential Solid Fuel Use. *Geohealth*. 2018;2(1):25-39.

Kolasa E, Houlbert N, Balaguer P, Fardel O. AhR- and NF-kappaB-dependent induction of interleukin-6 by co-exposure to the environmental contaminant benzantracene and the cytokine tumor necrosis factor-alpha in human mammary MCF-7 cells. *Chemico-biological interactions*. 2013;203(2):391-400.

Kolbeneva LI, Veselovskaia KA, Loshchilov IA. Morphofunctional changes in the rat peripheral nervous system during separate and combined exposure to

carbon disulfide and noise. *Gigiena truda i professional'nye zabolevaniia*. 1982(12):35-9.

Kolesnyk S, Riabukha O, Prodanchuk M, Zhminko P, Vasetska O. Acute mixture toxicity of pesticide formulations and perspective of use in silico methods to complement risk assessment of plant protection products. *Toxicology Letters*. 2018;295:S238-S.

Kolesov MA. Effect of special training on the resistance of white rats to combined exposure to hypoxia and negative G-forces. *Kosmicheskaiia biologiiia i aviakosmicheskaiia meditsina*. 1980;14(2):85-6.

Kolhe AR, Aher GR, Ralegankar SD, Safai PD. Investigation of aerosol black carbon over semi-urban and urban locations in south-western India. *Atmospheric Pollution Research*. 2018;9(6):1111-30.

Komarov VP, Petin VG. Mathematical model of yeast cell recovery after combined exposure to ionizing radiation and hyperthermia. *Radiobiologiia*. 1984;24(5):700-3.

Komarova LN, Tkhabisimova MD, Petin VG. Prognosis of yeast cells recovery after simultaneous exposure to UV-radiation and hyperthermia. *Tsitologiia*. 2007;49(1):83-8.

Kompan F, Divliansky I, Smirnov V, Glebov L. Holographic lens for 532 nm in photo-thermo-refractive glass. *Optics and Laser Technology*. 2018;105:264-7.

Konczalik JR. Combined exposure to lead and cadmium in selected groups of people in Upper Silesia. *Wiadomosci lekarskie (Warsaw, Poland : 1960)*. 2002;55 Suppl 1:249-55.

Konig A, Zoller N, Kippenberger S, Bernd A, Kaufmann R, Layer PG, et al. Non-thermal near-infrared exposure photobiomodulates cellular responses to ionizing radiation in human full thickness skin models. *Journal of Photochemistry and Photobiology B-Biology*. 2018;178:115-23.

Konkel L. Assessing a Medley of Metals: Combined Exposures and Incident Coronary Heart Disease. *Environmental Health Perspectives*. 2018;126(3).

Konkel L. Assessing a Medley of Metals: Combined Exposures and Incident Coronary Heart Disease. *Environmental health perspectives*. 2018;126(3):034002.

Konkina NI. Effect of combined exposure to hypokinesia and gravitational stress on the structure of the wall of the renal vein. *Arkhiv anatomii, gistologii i embriologii*. 1978;74(6):80-4.

Konoplia AI, Smakhtin MI. Interrelationship between splenocyte immunomodulating factors in animals undergoing combined exposure to ethanol and tetrachloromethane. *Patologicheskaiia fiziologiia i eksperimental'naia terapiia*. 1995(4):22-4.

Konschak M, Zubrod JP, Bandy P, Englert D, Herrmann B, Schulz R, et al. Waterborne and diet-related effects of inorganic and organic fungicides on the insect leaf shredder *Chaetopteryx villosa* (Trichoptera). *Aquatic Toxicology*. 2019;206:33-42.

Kooijman S. Models in stress research. *Ecological Complexity*. 2018;34:161-77.

Kopp B, Vignard J, Mirey G, Fessard V, Zalko D, Le Hegarat L, et al. Genotoxicity and mutagenicity assessment of food contaminant mixtures present in the French diet. *Environmental and Molecular Mutagenesis*. 2018;59(8):742-54.

Kopp R, Mares J, Soukupova Z, Navratil S, Palikova M. Influence of arsenic and cyanobacteria co-exposure on plasmatic parameters of rainbow trout (*Oncorhynchus mykiss* W.). *Neuro endocrinology letters*. 2014;35 Suppl 2:57-63.

Kopp R, Palikova M, Papezikova I, Mares J, Navratil S, Pikula J, et al. Oxidative stress response of rainbow trout (*Oncorhynchus mykiss*) to multiple stressors. *Acta Veterinaria Brno*. 2018;87(1):55-64.

Koppel DJ, Adams MS, King CK, Jolley DF. Chronic toxicity of an environmentally relevant and equitoxic ratio of five metals to two Antarctic marine microalgae shows complex mixture interactivity. *Environmental Pollution*. 2018;242:1319-30.

Koreshkov AA, Makarov VI, Abramov IR, Kots AR. Circadian rhythm of psychomotor reactions in humans exposed to the combined effects of 18-hour day schedule and increased levels of carbon dioxide. *Kosmicheskaiia biologiia i aviakosmicheskaiia meditsina*. 1988;22(3):88-91.

Kornder NA, Riegl BM, Figueiredo J. Thresholds and drivers of coral calcification responses to climate change. *Global Change Biology*. 2018;24(11):5084-95.

Korsak Z, Sokal J, Dedyk A, Tomas T, Jedrychowski R. Toxic effects of combined exposure to toluene and xylene in animals. I. Acute inhalation study. *Polish journal of occupational medicine*. 1988;1(1):45-50.

Korsak Z, Sokal JA, Gorny R. Toxic effects of combined exposure to toluene and m-xylene in animals. III. Subchronic inhalation study. Polish journal of occupational medicine and environmental health. 1992;5(1):27-33.

Korsak Z, Sokal JA, Swiercz R. The toxic effects of combined exposure to toluene and m-xylene in animals. II. Blood toluene and m-xylene during single and combined exposure in rats. Polish journal of occupational medicine and environmental health. 1991;4(4):377-81.

Korsak Z, Swiercz R, Jedrychowski R. Effects of acute combined exposure to N-butyl alcohol and M-xylene. Polish journal of occupational medicine and environmental health. 1993;6(1):35-41.

Korsak Z, Wisniewska-Knypl J, Swiercz R. Toxic effects of subchronic combined exposure to n-butyl alcohol and m-xylene in rats. International journal of occupational medicine and environmental health. 1994;7(2):155-66.

Korte A, Wagner HM, Obe G. Simultaneous exposure of Chinese hamsters to ethanol and cigarette smoke: cytogenetic aspects. Toxicology. 1981;20(2-3):237-46.

Kortenkamp A, Faust M. Combined exposures to anti-androgenic chemicals: steps towards cumulative risk assessment. International journal of andrology. 2010;33(2):463-74.

Koskinen A, Lukkarinen H, Laine J, Ahotupa M, Kaapa P, Soukka H. Delay in rat lung alveolarization after the combined exposure of maternal hyperglycemia and postnatal hyperoxia. Pediatric pulmonology. 2014;49(2):179-88.

Kostoff RN, Goumenou M, Tsatsakis A. The role of toxic stimuli combinations in determining safe exposure limits. Toxicology Reports. 2018;5:1169-72.

Kotey S, Carrico R, Wiemken TL, Furmanek S, Bosson R, Nyantakyi F, et al. Elevated Blood Lead Levels by Length of Time From Resettlement to Health Screening in Kentucky Refugee Children. American Journal of Public Health. 2018;108(2):270-6.

Kotov AN. Human pulmonary diffusing capacity in combined exposure to hypokinesia and hypoxia. Kosmicheskaia biologii i aviakosmicheskaia meditsina. 1977;11(2):85-6.

Kovacova V, Piacek V, Abdelsalam EEE, Bandouchova H, Heger T, Kobelkova K, et al. Tissue metallothionein response in the Japanese quail

associated with exposure to cyanobacterial biomass, lead and the Newcastle disease virus. *Neuroendocrinology Letters*. 2018;39(8):567-71.

Koyama S, Nakahara T, Sakurai T, Komatsubara Y, Isozumi Y, Miyakoshi J. Combined exposure of ELF magnetic fields and x-rays increased mutant yields compared with x-rays alone in pTN89 plasmids. *Journal of radiation research*. 2005;46(2):257-64.

Kraft JC, Willhite CC, Juchau MR. Embryogenesis in cultured whole rat embryos after combined exposures to 3,3',5-triiodo-L-thyronine (T3) plus all-trans-retinoic acid and to T3 plus 9-cis-retinoic acid. *Journal of craniofacial genetics and developmental biology*. 1994;14(2):75-86.

Krais AM, Andersen C, Eriksson AC, Johnsson E, Nielsen J, Pagels J, et al. Excretion of Urinary Metabolites of the Phthalate Esters DEP and DEHP in 16 Volunteers after Inhalation and Dermal Exposure. *International Journal of Environmental Research and Public Health*. 2018;15(11).

Kreitinger C, Gutierrez H, Hamidovic A, Schmitt C, Sarangarm P, Rayburn WF, et al. The effect of prenatal alcohol co-exposure on neonatal abstinence syndrome in infants born to mothers in opioid maintenance treatment. *The journal of maternal-fetal & neonatal medicine : the official journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*. 2016;29(5):783-8.

Kriegbaum M, Lund R, Schmidt L, Rod NH, Christensen U. The joint effect of unemployment and cynical hostility on all-cause mortality: results from a prospective cohort study. *Bmc Public Health*. 2019;19.

Krifaton C, Kriszt B, Szoboszlay S, Cserhati M, Szucs A, Kukolya J. Analysis of aflatoxin-B1-degrading microbes by use of a combined toxicity-profiling method. *Mutation research*. 2011;726(1):1-7.

Krishnamurthy CKB, Vesterberg M, Book H, Lindfors AV, Svento R. Real-time pricing revisited: Demand flexibility in the presence of micro-generation. *Energy Policy*. 2018;123:642-58.

Krishnamurthy SV, Smith GR. Combined effects of malathion and nitrate on early growth, abnormalities, and mortality of wood frog (*Rana sylvatica*) tadpoles. *Ecotoxicology (London, England)*. 2011;20(6):1361-7.

Kristan DM, Hammond KA. Combined effects of cold exposure and sub-lethal intestinal parasites on host morphology and physiology. *The Journal of experimental biology*. 2000;203(Pt 22):3495-504.

Krstic D, Colovic M, Krinulovic K, Djuric D, Vasic V. Inhibition of AChE by single and simultaneous exposure to malathion and its degradation products. *General physiology and biophysics*. 2007;26(4):247-53.

Ku T, Ji X, Zhang Y, Li G, Sang N. PM2.5, SO2 and NO2 co-exposure impairs neurobehavior and induces mitochondrial injuries in the mouse brain. *Chemosphere*. 2016;163:27-34.

Kubena LF, Huff WE, Harvey RB, Phillips TD, Rottinghaus GE. Individual and combined toxicity of deoxynivalenol and T-2 toxin in broiler chicks. *Poultry science*. 1989;68(5):622-6.

Kubena LF, Smith EE, Gentles A, Harvey RB, Edrington TS, Phillips TD, et al. Individual and combined toxicity of T-2 toxin and cyclopiazonic acid in broiler chicks. *Poultry science*. 1994;73(9):1390-7.

Kucheruk TK. Characteristics of combined effect of thermal and welding aerosol exposure. *Likars'ka sprava*. 2002(1):139-43.

Kucuker DM, Baskent EZ. Modeling the productivity of commercial *Lactarius* mushrooms: A case study in the Kizilcasu planning unit, Turkey. *Natural Resource Modeling*. 2019;32(1).

Kudo S, Iijima A, Kumagai K, Tago H, Ichijo M. An exhaustive classification for the seasonal variation of organic peaks in the atmospheric fine particles obtained by a gas chromatography/mass spectrometry. *Environmental Technology & Innovation*. 2018;12:14-26.

Kuhlmann J, Kretschmann AC, Bester K, Bollmann UE, Dalhoff K, Cedergreen N. Enantioselective mixture toxicity of the azole fungicide imazalil with the insecticide alpha-cypermethrin in *Chironomus riparius*: Investigating the importance of toxicokinetics and enzyme interactions. *Chemosphere*. 2019;225:166-73.

Kuhnel M, Frohlich T, Fussl R, Hoffmann M, Manske E, Rangelow IW, et al. Towards alternative 3D nanofabrication in macroscopic working volumes. *Measurement Science and Technology*. 2018;29(11).

Kuligowski ZK. Motor conditioned reflexes in rats exposed to the combined effect of vibrations and noise. *Acta physiologica Polonica*. 1961;12:821-32.

Kumar A, Ahmad I, Shukla S, Singh BK, Patel DK, Pandey HP, et al. Effect of zinc and paraquat co-exposure on neurodegeneration: Modulation of oxidative stress and expression of metallothioneins, toxicant responsive and transporter genes in rats. *Free radical research*. 2010;44(8):950-65.

Kumar V, Basniwal PK, Vijayaraghavan R. EFFECT OF COMBINED EXPOSURE OF DICHLORVOS AND MONOCROTOPHOS ON NEUROTRANSMITTERS AND ACETYLCHOLINESTERASE IN RAT. *International Journal of Pharmaceutical Sciences and Research*. 2018;9(11):4956-62.

Kupriianov AA, Zorile VI, Dudnikov VV. Characteristics of human activity in the simultaneous exposure to linear accelerations and hypoxia. *Voenno-meditsinskii zhurnal*. 1976(6):62-5.

Kurai J, Onuma K, Sano H, Okada F, Watanabe M. Ozone augments interleukin-8 production induced by ambient particulate matter. *Genes and Environment*. 2018;40.

Kurazumi T, Ogawa Y, Yanagida R, Morisaki H, Iwasaki K. Non-Invasive Intracranial Pressure Estimation During Combined Exposure to CO₂ and Head-Down Tilt. *Aerospace Medicine and Human Performance*. 2018;89(4):365-70.

Kurazumi T, Ogawa Y, Yanagida R, Morisaki H, Iwasaki K-I. Non-Invasive Intracranial Pressure Estimation During Combined Exposure to CO₂, and Head-Down Tilt. *Aerospace medicine and human performance*. 2018;89(4):365-70.

Kurhanewicz N, McIntosh-Kastrinsky R, Tong H, Walsh L, Farraj AK, Hazari MS. Ozone co-exposure modifies cardiac responses to fine and ultrafine ambient particulate matter in mice: concordance of electrocardiogram and mechanical responses. *Particle and fibre toxicology*. 2014;11:54.

Kurpeshev OK. Skin reaction in combined exposure to ionizing radiation and heating in different sequences. *Meditzinskaia radiologiya*. 1984;29(12):78-80.

Kurppa K. Marked lethality of rats in combined exposure to carbon monoxide and diethyldithiocarbamate. *Research communications in chemical pathology and pharmacology*. 1981;33(1):179-82.

Kurtyka R, Burdach Z, Siemieniuk A, Karcz W. Single and combined effects of Cd and Pb on the growth, medium pH, membrane potential and metal contents in maize (*Zea mays* L.) coleoptile segments. *Ecotoxicology and Environmental Safety*. 2018;161:8-16.

Kusic H, Leszczynska D. Altered toxicity of organic pollutants in water originated from simultaneous exposure to UV photolysis and CdSe/ZnS quantum dots. *Chemosphere*. 2012;89(7):900-6.

Kuypers DRJ, de Loor H, Naesens M, Coopmans T, de Jonge H. Combined effects of CYP3A5*1, POR*28, and CYP3A4*22 single nucleotide

polymorphisms on early concentration-controlled tacrolimus exposure in de-novo renal recipients. *Pharmacogenetics and genomics*. 2014;24(12):597-606.

Kwon DY, Kim H-M, Kim E, Lim Y-M, Kim P, Choi K, et al. Acute pulmonary toxicity and inflammation induced by combined exposure to didecyldimethylammonium chloride and ethylene glycol in rats. *The Journal of toxicological sciences*. 2016;41(1):17-24.

Lacaze E, Gendron AD, Miller JL, Colson TLL, Sherry JP, Giraudo M, et al. Cumulative effects of municipal effluent and parasite infection in yellow perch: A field study using high-throughput RNA-sequencing. *Science of the Total Environment*. 2019;665:797-809.

Lacourt A, Rinaldo M, Gramond C, Ducamp S, Gilg Soit Ilg A, Goldberg M, et al. Co-exposure to refractory ceramic fibres and asbestos and risk of pleural mesothelioma. *The European respiratory journal*. 2014;44(3):725-33.

Lacroix BD, Karlsson MO, Friberg LE. Simultaneous Exposure-Response Modeling of ACR20, ACR50, and ACR70 Improvement Scores in Rheumatoid Arthritis Patients Treated With Certolizumab Pegol. *CPT: pharmacometrics & systems pharmacology*. 2014;3:e143.

Ladefoged O, Hass U, Simonsen L. Neurophysiological and behavioural effects of combined exposure to 2,5-hexanedione and acetone or ethanol in rats. *Pharmacology & toxicology*. 1989;65(5):372-5.

Laeremans M, Dons E, Avila-Palencia I, Carrasco-Turigas G, Orjuela JP, Anaya E, et al. Short-term effects of physical activity, air pollution and their interaction on the cardiovascular and respiratory system. *Environment International*. 2018;117:82-90.

Lafi B, Chaabane M, Elwej A, Grati M, Jamoussi K, Mnif H, et al. Effects of co-exposure to imidacloprid and gibberellic acid on redox status, kidney variables and histopathology in adult rats. *Archives of Physiology and Biochemistry*. 2018;124(2):175-84.

Lah H, Blair W, Ehrlich R, Shefner A. COMBINED TOXICITY OF STAPHYLOCOCCAL ENTEROTOXIN AND ALPHA-METHYL-3,4-DIHYDROXY-1-PHENYLALANINE (METHYL-DOPA). *Nature*. 1964;202:1226.

Lai H, Liu Y, Zhou M, Shi T, Zhou Y, Weng S, et al. Combined effect of silica dust exposure and cigarette smoking on total and cause-specific mortality in

iron miners: a cohort study. *Environmental health : a global access science source*. 2018;17(1):46.

Lai HP, Liu YW, Zhou M, Shi TM, Zhou Y, Weng SF, et al. Combined effect of silica dust exposure and cigarette smoking on total and cause-specific mortality in iron miners: a cohort study. *Environmental Health*. 2018;17.

Lakhov FP. Combined effects of noise and hyperbarism on man in atmosphere exposure chamber. *Gigiena truda i professional'nye zabolevaniia*. 1982(10):43-4.

Lam CW, Casanova M, Heck HD. Depletion of nasal mucosal glutathione by acrolein and enhancement of formaldehyde-induced DNA-protein cross-linking by simultaneous exposure to acrolein. *Archives of toxicology*. 1985;58(2):67-71.

Lam CY, Businelle MS, Aigner CJ, McClure JB, Cofta-Woerpel L, Cinciripini PM, et al. Individual and combined effects of multiple high-risk triggers on postcessation smoking urge and lapse. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*. 2014;16(5):569-75.

Lam MM, Bulow R, Engwall M, Giesy JP, Larsson M. Methylated PACs Are More Potent Than Their Parent Compounds: A Study of Aryl Hydrocarbon Receptor-Mediated Activity, Degradability, and Mixture Interactions in the H4IIE-luc Assay. *Environmental Toxicology and Chemistry*. 2018;37(5):1409-19.

Lance E, Desprat J, Holbech BF, Gerard C, Bormans M, Lawton LA, et al. Accumulation and detoxication responses of the gastropod *Lymnaea stagnalis* to single and combined exposures to natural (cyanobacteria) and anthropogenic (the herbicide RoundUp() Flash) stressors. *Aquatic toxicology (Amsterdam, Netherlands)*. 2016;177:116-24.

Landauer MR, Elliott TB, King GL, Bouhaouala SS, Wilhelmsen CL, Ferrell JL, et al. Performance decrement after combined exposure to ionizing radiation and *Shigella sonnei*. *Military medicine*. 2001;166(12 Suppl):71-3.

Landaverde-Gonzalez P, Baltz LM, Escobedo-Kenefic N, Merida J, Paxton RJ, Husemann M. Recent low levels of differentiation in the native *Bombus ephippiatus* (Hymenoptera: Apidae) along two Neotropical mountain-ranges in Guatemala. *Biodiversity and Conservation*. 2018;27(13):3513-31.

Langauer-Lewowicka H, Braszczyńska Z. Evaluation of the combined effect of various harmful physical and chemical factors on the nervous system. *Neurologia i neurochirurgia polska*. 1983;17(1):91-6.

Langauer-Lewowicka H, Kazibutowska Z. Value of the studies of multimodal evoked potentials for evaluation of neurotoxic effects of combined exposure to lead, copper and zinc. *Neurologia i neurochirurgia polska*. 1991;25(6):715-9.

Lange A, Ausseil O, Segner H. Alterations of tissue glutathione levels and metallothionein mRNA in rainbow trout during single and combined exposure to cadmium and zinc. *Comparative biochemistry and physiology Toxicology & pharmacology : CBP*. 2002;131(3):231-43.

Langerwisch F, Vaclavik T, von Bloh W, Vetter T, Thonicke K. Combined effects of climate and land-use change on the provision of ecosystem services in rice agro-ecosystems. *Environmental Research Letters*. 2018;13(1).

Langford D, Grigorian A, Hurford R, Adame A, Crews L, Masliah E. The role of mitochondrial alterations in the combined toxic effects of human immunodeficiency virus Tat protein and methamphetamine on calbindin positive-neurons. *Journal of neurovirology*. 2004;10(6):327-37.

Lanier C, Bernard F, Dumez S, Leclercq J, Lemiere S, Vandebulcke F, et al. Combined effect of Cd and Pb spiked field soils on bioaccumulation, DNA damage, and peroxidase activities in *Trifolium repens*. *Environmental science and pollution research international*. 2016;23(2):1755-67.

Lanier C, Bernard F, Dumez S, Leclercq-Dransart J, Lemiere S, Vandebulcke F, et al. Combined toxic effects and DNA damage to two plant species exposed to binary metal mixtures (Cd/Pb). *Ecotoxicology and Environmental Safety*. 2019;167:278-87.

Lanteigne M, Whiting SA, Lydy MJ. Mixture toxicity of imidacloprid and cyfluthrin to two non-target species, the fathead minnow *Pimephales promelas* and the amphipod *Hyalella azteca*. *Archives of environmental contamination and toxicology*. 2015;68(2):354-61.

Lapointe D, Pierron F, Couture P. Individual and combined effects of heat stress and aqueous or dietary copper exposure in fathead minnows (*Pimephales promelas*). *Aquatic toxicology (Amsterdam, Netherlands)*. 2011;104(1-2):80-5.

Laquaz M, Dagot C, Bazin C, Bastide T, Gaschet M, Ploy MC, et al. Ecotoxicity and antibiotic resistance of a mixture of hospital and urban sewage in a wastewater treatment plant. *Environmental Science and Pollution Research*. 2018;25(10):9243-53.

Lataye R, Campo P, Loquet G. Combined effects of noise and styrene exposure on hearing function in the rat. *Hearing research*. 2000;139(1-2):86-96.

Lataye R, Campo P. Combined effects of a simultaneous exposure to noise and toluene on hearing function. *Neurotoxicology and teratology*. 1997;19(5):373-82.

Laufenberg JS, Johnson HE, Doherty PF, Breck SW. Compounding effects of human development and a natural food shortage on a black bear population along a human development-wildland interface. *Biological Conservation*. 2018;224:188-98.

Lavtizar V, Kimura D, Asaoka S, Okamura H. The influence of seawater properties on toxicity of copper pyrrhione and its degradation product to brine shrimp *Artemia salina*. *Ecotoxicology and Environmental Safety*. 2018;147:132-8.

Lazuko SS, Solodkov AP, Skrinaus SS. Functional activity of BK(Ca) channels in coronary vascular smooth muscle cells during combined exposure to hyperglycemia and stress. *Bulletin of experimental biology and medicine*. 2014;156(3):310-6.

Le TH, Alassane-Kpembé I, Oswald IP, Pinton P. Analysis of the interactions between environmental and food contaminants, cadmium and deoxynivalenol, in different target organs. *Science of the Total Environment*. 2018;622:841-8.

Leaffer D, Wolfe C, Doroff S, Gute D, Wang G, Ryan P. Wearable Ultrafine Particle and Noise Monitoring Sensors Jointly Measure Personal Co-Exposures in a Pediatric Population. *International Journal of Environmental Research and Public Health*. 2019;16(3).

Lebrun JD, Uher E, Fechner LC. Behavioural and biochemical responses to metals tested alone or in mixture (Cd-Cu-Ni-Pb-Zn) in *Gammarus fossarum*: From a multi-biomarker approach to modelling metal mixture toxicity. *Aquatic toxicology (Amsterdam, Netherlands)*. 2017;193:160-7.

Lee B-E, Ha E-H. Response to commentary "Co-exposure and confounders during neurodevelopment: we need them in the bigger picture of secondhand smoke exposure during pregnancy". *Environmental research*. 2012;112:235.

Lee H-J, Jin YB, Kim T-H, Pack J-K, Kim N, Choi H-D, et al. The effects of simultaneous combined exposure to CDMA and WCDMA electromagnetic fields on rat testicular function. *Bioelectromagnetics*. 2012;33(4):356-64.

Lee H-J, Jin YB, Lee JS, Choi J-I, Lee J-W, Myung SH, et al. Combined effects of 60Hz electromagnetic field exposure with various stress factors on cellular transformation in NIH3T3 cells. *Bioelectromagnetics*. 2012;33(3):207-14.

Lee H-J, Jin YB, Lee J-S, Choi SY, Kim T-H, Pack J-K, et al. Lymphoma development of simultaneously combined exposure to two radiofrequency signals in AKR/J mice. *Bioelectromagnetics*. 2011;32(6):485-92.

Lee H-J, Lee J-S, Pack J-K, Choi H-D, Kim N, Kim S-H, et al. Lack of teratogenicity after combined exposure of pregnant mice to CDMA and WCDMA radiofrequency electromagnetic fields. *Radiation research*. 2009;172(5):648-52.

Lee I-C, Ko J-W, Park S-H, Shin I-S, Moon C, Kim S-H, et al. Melamine and cyanuric acid co-exposure causes renal dysfunction and structural damage via MAPKs and mitochondrial signaling. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2016;96:254-62.

Lee J-H, Landrum PF. Development of a multi-component Damage Assessment Model (MDAM) for time-dependent mixture toxicity with toxicokinetic interactions. *Environmental science & technology*. 2006;40(4):1341-9.

Lee JS, Mustafa MG, Afifi AA. Effects of short-term, single and combined exposure to low-level NO₂ and O₃ on lung tissue enzyme activities in rats. *Journal of toxicology and environmental health*. 1990;29(3):293-305.

Lee JY, Chung SM, Lee MY, Chung JH. Ethanol co-exposure increases lethality of allyl alcohol in male Sprague-Dawley rats. *Journal of toxicology and environmental health Part A*. 1999;56(2):121-30.

Lee KW, Chang Z, Oh B-S, Lu M, Park J-S. Estrogenic response in male bullfrog (*Rana catesbeiana*) hepatocytes after single or combined exposure to cadmium (Cd) and 17beta-estradiol (E₂). *Bulletin of environmental contamination and toxicology*. 2010;85(5):452-6.

Lee S, Ishibashi S, Shimomura Y, Katsuura T. Effect of simultaneous exposure to extremely short pulses of blue and green light on human pupillary constriction (vol 35, 20, 2016). *Journal of Physiological Anthropology*. 2018;37.

Lee S, Ishibashi S, Shimomura Y, Katsuura T. Effect of simultaneous exposure to extremely short pulses of blue and green light on human pupillary constriction. *Journal of physiological anthropology*. 2016;35(1):20.

Lee S, Kakitsuba N, Katsuura T. Do green-blocking glasses enhance the nonvisual effects of white polychromatic light? *Journal of Physiological Anthropology*. 2018;37.

Lee SK, Park JY, Yu ES, Yang WS, Kim SB, Park SK, et al. Individual or combined effects of enalapril and verapamil on chronic cyclosporine nephrotoxicity in rats. *Journal of Korean medical science*. 1999;14(6):653-8.

Lee SU, Lee JE, Kim SJ, Lee JS. Effects of titanium dioxide nanoparticles on the inhibition of cellular activity in human Tenon's fibroblasts under UVA exposure. *Graefes Archive for Clinical and Experimental Ophthalmology*. 2018;256(10):1895-903.

Lee W-M, Yoon Y, An Y-J. Combined toxicities of methyl tert-butyl ether and its metabolite tert-butyl alcohol on earthworms via different exposure routes. *Chemosphere*. 2015;128:191-8.

Leeman WR, Krul L, Houben GF. Complex mixtures: relevance of combined exposure to substances at low dose levels. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2013;58:141-8.

Lehto M, Karilainen T, Rog T, Cramariuc O, Vanhala E, Tornaes J, et al. Co-exposure with fullerene may strengthen health effects of organic industrial chemicals. *PloS one*. 2014;9(12):e114490.

Leite GAA, Figueiredo TM, Pacheco TL, Guerra MT, Anselmo-Franci JA, Kempinas WD. Reproductive outcomes in rat female offspring from male rats co-exposed to rosuvastatin and ascorbic acid during pre-puberty. *Journal of Toxicology and Environmental Health-Part a-Current Issues*. 2018;81(17):873-92.

Leitgeb N, Cech R. Dosimetric assessment of simultaneous exposure to elf electric and magnetic fields. *IEEE transactions on bio-medical engineering*. 2008;55(2 Pt 1):671-4.

Lentini A, Falasca L, Autuori F, Dini L. The simultaneous exposition of galactose and mannose-specific receptors on rat liver macrophages is developmentally regulated. *Bioscience reports*. 1992;12(6):453-61.

Lenz B, Fogarty ND, Figueiredo J. Effects of ocean warming and acidification on fertilization success and early larval development in the green sea urchin *Lytechinus variegatus*. *Marine Pollution Bulletin*. 2019;141:70-8.

Leone A. Interactive effect of combined exposure to active and passive smoking on cardiovascular system. Recent patents on cardiovascular drug discovery. 2011;6(1):61-9.

Leroux T, Klæboe R. Combined exposures: an update from the International Commission on Biological Effects of Noise. Noise & health. 2012;14(61):313-4.

Letierce A, Tubert-Bitter P, Kramar A, Maccario J. Two-treatment comparison based on joint toxicity and efficacy ordered alternatives in cancer trials. Statistics in medicine. 2003;22(6):859-68.

Leung PTY, Yi AX, Ip JCH, Mak SST, Leung KMY. Photosynthetic and transcriptional responses of the marine diatom *Thalassiosira pseudonana* to the combined effect of temperature stress and copper exposure. Marine pollution bulletin. 2017;124(2):938-45.

Levdik TI, Buldakov LA, Dement'ev SI. Evaluation of changes in the median life span of animals following separate and combined exposures to external ¹³⁷Cs gamma irradiation and incorporated ²³⁹Pu. Radiobiologia. 1989;29(4):550-3.

Leve M, Baudry E, Bessa-Gomes C. Domestic gardens as favorable pollinator habitats in impervious landscapes. Science of the Total Environment. 2019;647:420-30.

Levine SL, Borgert CJ. Review and recommendations on criteria to evaluate the relevance of pesticide interaction data for ecological risk assessments. Chemosphere. 2018;209:124-36.

Lewis M, Thursby G. Aquatic plants: Test species sensitivity and minimum data requirement evaluations for chemical risk assessments and aquatic life criteria development for the USA. Environmental Pollution. 2018;238:270-80.

Li B, Guo H. Study on the combined toxicity of aflatoxin B1 and deoxynivalenol. Wei sheng yan jiu = Journal of hygiene research. 2000;29(6):393-5.

Li B, Xu L, Tao F, Xie K, Wu Z, Li Y, et al. Simultaneous exposure to FcγR and FcαR on monocytes and macrophages enhances antitumor activity in vivo. Oncotarget. 2017;8(24):39356-66.

Li BX, Li H, Pang XY, Cui KD, Lin J, Liu F, et al. Quaternary ammonium cationic surfactants increase bioactivity of indoxacarb on pests and toxicological risk to *Daphnia magna*. Ecotoxicology and Environmental Safety. 2018;149:190-6.

Li BX, Lin J, Pang XY, Li H, Li XH, Liu F, et al. Binary mixtures of alcohol ethoxylates, nonylphenol ethoxylates and pesticides exhibit comparative bioactivity against three pests and toxicological risks to aquatic organisms. *Chemosphere*. 2018;204:44-50.

Li BX, Liu Y, Zhang P, Li XX, Pang XY, Zhao YH, et al. Selection of organosilicone surfactants for tank-mixed pesticides considering the balance between synergistic effects on pests and environmental risks. *Chemosphere*. 2019;217:591-8.

Li BX, Pang XY, Zhang P, Lin J, Li XX, Liu Y, et al. Alcohol ethoxylates significantly synergize pesticides than alkylphenol ethoxylates considering bioactivity against three pests and joint toxicity to *Daphnia magna*. *Science of the Total Environment*. 2018;644:1452-9.

Li CF, Han QF, Luo GP, Zhao CY, Li SB, Wang YG, et al. Effects of Cropland Conversion and Climate Change on Agrosystem Carbon Balance of China's Dryland: A Typical Watershed Study. *Sustainability*. 2018;10(12).

Li D, Hu Y, Shen X, Dai X, Han X. Combined effects of two environmental endocrine disruptors nonyl phenol and di-n-butyl phthalate on rat Sertoli cells in vitro. *Reproductive toxicology* (Elmsford, NY). 2010;30(3):438-45.

Li DD, Wang PF, Wang C, Fan XL, Wang X, Hu B. Combined toxicity of organophosphate flame retardants and cadmium to *Corbicula fluminea* in aquatic sediments. *Environmental Pollution*. 2018;243:645-53.

Li F, Pennings SC. Responses of Tidal Freshwater and Brackish Marsh Macrophytes to Pulses of Saline Water Simulating Sea Level Rise and Reduced Discharge. *Wetlands*. 2018;38(5):885-91.

Li F, Shi JH, Cheung SG, Shin PKS, Liu XS, Sun Y, et al. The combined effects of elevated pCO₂ and food availability on *Tigriopus japonicus* Mori larval development, reproduction, and superoxide dismutase activity. *Marine Pollution Bulletin*. 2018;126:623-8.

Li F, Shi JH, Cheung SG, Shin PKS, Liu XS, Sun Y, et al. The combined effects of elevated pCO₂ and food availability on *Tigriopus japonicus* Mori larval development, reproduction, and superoxide dismutase activity (vol 126, pg 623, 2018). *Marine Pollution Bulletin*. 2018;126:622-.

Li H, Yao J, Gu JH, Duran R, Roha B, Jordan G, et al. Microcalorimetry and enzyme activity to determine the effect of nickel and sodium butyl xanthate on soil microbial community. *Ecotoxicology and Environmental Safety*. 2018;163:577-84.

Li H, Zhang J, You J. Diagnosis of complex mixture toxicity in sediments: Application of toxicity identification evaluation (TIE) and effect-directed analysis (EDA). *Environmental pollution* (Barking, Essex : 1987). 2018;237:944-54.

Li HF, Li ZJ, Qu JH, Tian HL, Yang XH. Combined effects of phosphate-solubilizing bacterium XMT-5 (*Rhizobium* sp.) and submerged macrophyte *Ceratophyllum demersum* on phosphorus release in eutrophic lake sediments. *Environmental Science and Pollution Research*. 2018;25(19):18990-9000.

Li HR, La Guardia MJ, Liu HH, Hale RC, Mainor TM, Harvey E, et al. Brominated and organophosphate flame retardants along a sediment transect encompassing the Guiyu, China e-waste recycling zone. *Science of the Total Environment*. 2019;646:58-67.

Li HZ, Zhang J, You J. Diagnosis of complex mixture toxicity in sediments: Application of toxicity identification evaluation (TIE) and effect-directed analysis (EDA). *Environmental Pollution*. 2018;237:944-54.

Li J, Lu S, Liu G, Zhou Y, Lv Y, She J, et al. Co-exposure to polycyclic aromatic hydrocarbons, benzene and toluene and their dose-effects on oxidative stress damage in kindergarten-aged children in Guangzhou, China. *The Science of the total environment*. 2015;524-525:74-80.

Li J, Zhang H, Yuan GD. Phosphate affects adsorption and desorption of oxytetracycline in the seawater-sediment systems. *Environmental Science and Pollution Research*. 2018;25(28):28160-8.

Li J, Zhang KN, Zhang H. Adsorption of antibiotics on microplastics. *Environmental Pollution*. 2018;237:460-7.

Li JQ, Niu LJ, He XM. Enhanced visible-light activity of Ti³⁺ self-doped TiO₂ with co-exposed {001} and {101} facets. *Micro & Nano Letters*. 2018;13(4):514-7.

Li K, Xu YQ, Feng L, Liu SS. Assessing the influence of the genetically modified factor on mixture toxicological interactions in *Caenorhabditis elegans*: Comparison between wild type and a SOD type. *Environmental Pollution*. 2018;242:872-9.

Li M, Pei JC, Tang XM, Guo XL. Effects of surfactants on the combined toxicity of TiO₂ nanoparticles and cadmium to *Escherichia coli*. *Journal of Environmental Sciences*. 2018;74:126-33.

Li MC, Xiong MM, Xiang C, Cao JF. How Climate Change Impacts Energy Load Demand for Commercial and Residential Buildings in a Large City in Northern China. *Polish Journal of Environmental Studies*. 2018;27(5):2133-41.

Li P, Feng X, Shang L, Qiu G, Meng B, Zhang H, et al. Human co-exposure to mercury vapor and methylmercury in artisanal mercury mining areas, Guizhou, China. *Ecotoxicology and environmental safety*. 2011;74(3):473-9.

Li Q, Gabay M, Rubin Y, Fredj E, Tas E. Measurement-based investigation of ozone deposition to vegetation under the effects of coastal and photochemical air pollution in the Eastern Mediterranean. *Science of the Total Environment*. 2018;645:1579-97.

Li Q-S, Cai H-W, Li G-X, Chen G-Y, Ma X-Y, He W-L. Degradation behavior of triclosan by co-exposure to chlorine dioxide and UV irradiation: influencing factors and toxicity changes. *Environmental science and pollution research international*. 2018;25(10):9391-401.

Li QS, Cai HW, Li GX, Chen GY, Ma XY, He WL. Degradation behavior of triclosan by co-exposure to chlorine dioxide and UV irradiation: influencing factors and toxicity changes. *Environmental Science and Pollution Research*. 2018;25(10):9391-401.

Li R, Fu HB, Cui LL, Li JL, Wu Y, Meng Y, et al. The spatiotemporal variation and key factors of SO₂ in 336 cities across China. *Journal of Cleaner Production*. 2019;210:602-11.

Li SX, Qin HP, Peng YN, Khu ST. Modelling the combined effects of runoff reduction and increase in evapotranspiration for green roofs with a storage layer. *Ecological Engineering*. 2019;127:302-11.

Li SX, Yang H, Lacayo M, Liu JG, Lei GC. Impacts of Land-Use and Land-Cover Changes on Water Yield: A Case Study in Jing-Jin-Ji, China. *Sustainability*. 2018;10(4).

Li T, Liu S-S, Qu R, Liu H-L. Global concentration additivity and prediction of mixture toxicities, taking nitrobenzene derivatives as an example. *Ecotoxicology and environmental safety*. 2017;144:475-81.

Li TL, Xie YH, Gao ZQ, Hong JP, Li L, Meng HS, et al. Year-round film mulching system with monitored fertilization management improve grain yield and water and nitrogen use efficiencies of winter wheat in the dryland of the Loess Plateau, China. *Environmental Science and Pollution Research*. 2019;26(10):9524-35.

Li W, Wang XF, Liu JH, Jia YW, Qiu YQ. Decomposing the Driving Factors of Water Use in China. *Sustainability*. 2019;11(8).

Li W, Xu XG, Yao JM, Tanaka N, Nishimura O, Ma H. Combined effects of elevated carbon dioxide and temperature on phytoplankton-zooplankton link: A multi-influence of climate change on freshwater planktonic communities. *Science of the Total Environment*. 2019;658:1175-85.

Li X, Cai D. Single and combined toxic effects of di-2-ethylhexyl phthalate and cypermethrin on fertility and development in the the prepubertal male rats. *Wei sheng yan jiu = Journal of hygiene research*. 2012;41(5):710-6.

Li X, Xiao JF, He BB. Higher absorbed solar radiation partly offset the negative effects of water stress on the photosynthesis of Amazon forests during the 2015 drought. *Environmental Research Letters*. 2018;13(4).

Li X, Yin P, Zhao L. Effects of individual and combined toxicity of bisphenol A, dibutyl phthalate and cadmium on oxidative stress and genotoxicity in HepG 2cells. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2017;105:73-81.

Li XN, Song Y, Wang F, Bian YR, Jiang X. Combined effects of maize straw biochar and oxalic acid on the dissipation of polycyclic aromatic hydrocarbons and microbial community structures in soil: A mechanistic study. *Journal of Hazardous Materials*. 2019;364:325-31.

Li XX, Ke MJ, Zhang M, Peijnenburg W, Fan XJ, Xu JH, et al. The interactive effects of diclofop-methyl and silver nanoparticles on *Arabidopsis thaliana*: Growth, photosynthesis and antioxidant system. *Environmental Pollution*. 2018;232:212-9.

Li XZ, Wang ME, Chen WP, Jiang R. Evaluation of combined toxicity of Siduron and cadmium on earthworm (*Eisenia fetida*) using Biomarker Response Index. *Science of the Total Environment*. 2019;646:893-901.

Li Y, Liao XY, Huling SG, Xue T, Liu QZ, Cao HY, et al. The combined effects of surfactant solubilization and chemical oxidation on the removal of polycyclic aromatic hydrocarbon from soil. *Science of the Total Environment*. 2019;647:1106-12.

Li Y, Wu H, Wei X, He Y, Li B, Li Y, et al. Subcellular distribution of Cd and Zn and MT mRNA expression in the hepatopancreas of *Sinopotamon henanense* after single and co-exposure to Cd and Zn. *Comparative biochemistry and physiology Toxicology & pharmacology : CBP*. 2015;167:117-30.

Li YF, Zhu GQ, Zhai HH, Jia JM, Yang WH, Li XQ, et al. Simultaneous stimulation with tumor necrosis factor- α and transforming growth factor- β 1 induces epithelial-mesenchymal transition in colon cancer cells via the NF- κ B pathway. *Oncology Letters*. 2018;15(5):6873-80.

Li YL, Zhang Q. Historical and predicted variations of baseflow in China's Poyang Lake catchment. *River Research and Applications*. 2018;34(10):1286-97.

Li YN, Zhang C, Liu LL, Gong Y, Xie YX, Cao Y. The effects of baicalein or baicalin on the colloidal stability of ZnO nanoparticles (NPs) and toxicity of NPs to Caco-2 cells. *Toxicology Mechanisms and Methods*. 2018;28(3):167-76.

Li YY, Jin YY, Borrión A, Li JH. Influence of feed/inoculum ratios and waste cooking oil content on the mesophilic anaerobic digestion of food waste. *Waste Management*. 2018;73:156-64.

Li Z, Jia MY, Christie P, Ali S, Wu LH. Use of a hyperaccumulator and biochar to remediate an acid soil highly contaminated with trace metals and/or oxytetracycline. *Chemosphere*. 2018;204:390-7.

Li Z, Liu M, Chen LK, Li GZ. Combined Toxicity of an Environmental Remediation Residue, Magnetite Fe₃O₄ Nanoparticles/Cr(VI) Adduct. *Biomedical and environmental sciences : BES*. 2017;30(11):783-91.

Li Z, Zhang H, Gibson M, Liu P. An evaluation of the combined effects of phenolic endocrine disruptors on vitellogenin induction in goldfish *Carassius auratus*. *Ecotoxicology (London, England)*. 2012;21(7):1919-27.

Liang J, Xia XQ, Yuan L, Zhang W, Lin KF, Zhou BS, et al. The reproductive responses of earthworms (*Eisenia fetida*) exposed to nanoscale zero-valent iron (nZVI) in the presence of decabromodiphenyl ether (BDE209). *Environmental Pollution*. 2018;237:784-91.

Liang J, Zhou Q. Single and binary-combined toxicity of methamidophos, acetochlor and copper acting on earthworms *Eisenia foetida*. *Bulletin of environmental contamination and toxicology*. 2003;71(6):1158-66.

Liang J, Zhou Q. Single and binary-combined toxicity of methamidophos, acetochlor and Cu on earthworm *Eisenia foetida*. *Ying yong sheng tai xue bao = The journal of applied ecology*. 2003;14(4):593-6.

Liang LL, Campbell DI, Wall AM, Schipper LA. Nitrous oxide fluxes determined by continuous eddy covariance measurements from intensively grazed pastures: Temporal patterns and environmental controls. *Agriculture Ecosystems & Environment*. 2018;268:171-80.

Liang SH, Gou XF, Cui J, Luo YG, Qu HT, Zhang T, et al. Novel cone-like ZnO mesocrystals with co-exposed (1011) and (0001) facets and enhanced photocatalytic activity. *Inorganic Chemistry Frontiers*. 2018;5(9):2257-67.

Liang X, Chen Q, Wu CL, Zhao HP. The joint toxicity of bifenazate and propargite mixture against *Tetranychus urticae* Koch. *International Journal of Acarology*. 2018;44(1):35-40.

Liang Y, Lu XX, Min YQ, Liu LL, Yang JX. Interactive effects of microcystin and ammonia on the reproductive performance and phenotypic traits of the rotifer *Brachionus calyciflorus*. *Ecotoxicology and Environmental Safety*. 2018;147:413-22.

Liang YQ, Huang GY, Zhen Z, Tian F, Hou LP, Lin Z, et al. The effects of binary mixtures of estradiol and progesterone on transcriptional expression profiles of genes involved in hypothalamic-pituitary-gonadal axis and circadian rhythm signaling in embryonic zebrafish (*Danio rerio*). *Ecotoxicology and Environmental Safety*. 2019;174:540-8.

Liao BH, Liu HY, Lu SQ, Wang KF, Probst A, Probst JL. Combined toxic effects of cadmium and acid rain on *Vicia faba* L. *Bulletin of environmental contamination and toxicology*. 2003;71(5):998-1004.

Liao HM, Yang XG, Xu FG, Xu H, Zhou JW. A fuzzy comprehensive method for the risk assessment of a landslide-dammed lake. *Environmental Earth Sciences*. 2018;77(22).

Liao RK, Zhang LZ, Yang PL, Wu WY, Zhang ZC. Physiological regulation mechanism of multi-chemicals on water transport and use efficiency in soil-maize system. *Journal of Cleaner Production*. 2018;172:1289-97.

Libert JP, Bach V, Johnson LC, Ehrhart J, Wittersheim G, Keller D. Relative and combined effects of heat and noise exposure on sleep in humans. *Sleep*. 1991;14(1):24-31.

Liccardi G, Calzetta L, Milanese M, Lombardi C, Savi E, Passalacqua G, et al. Critical aspects in dog allergen immunotherapy (DAI). May Component Resolved Diagnosis (CRD) play a role in predicting the efficacy? *Human Vaccines & Immunotherapeutics*. 2018;14(6):1438-41.

Liew YP, Bartholomew JR, Demirjian S, Michaels J, Schreiber MJ, Jr. Combined effect of chronic kidney disease and peripheral arterial disease on all-cause mortality in a high-risk population. *Clinical journal of the American Society of Nephrology : CJASN*. 2008;3(4):1084-9.

Likhachev AI. Combined effect of carcinogenic substances. *Voprosy onkologii*. 1968;14(10):114-24.

Likhtenshtein VA, Mugutdinov TM. Intensification of the somnogenic effect of heat pulsation by simultaneous exposure of 2 reflexogenic zones. *Fiziologiya cheloveka*. 1985;11(4):689-91.

Lilley R, Lamontagne AD, Firth H. Combined exposures to workplace psychosocial stressors: relationships with mental health in a sample of NZ cleaners and clerical workers. *American journal of industrial medicine*. 2011;54(5):405-9.

Lim SJ, Gombojav B, Jee SH, Nam CM, Ohrr H. Gender-specific combined effects of smoking and hypertension on cardiovascular disease mortality in elderly Koreans: The Kangwha Cohort Study. *Maturitas*. 2012;73(4):331-6.

Lima MPR, Soares AMVM, Loureiro S. Responses of wheat (*Triticum aestivum*) and turnip (*Brassica rapa*) to the combined exposure of carbaryl and ultraviolet radiation. *Environmental toxicology and chemistry*. 2015;34(7):1665-74.

Limon-Pacheco JH, Jimenez-Cordova MI, Cardenas-Gonzalez M, Retana IMS, Gonsebatt ME, Del Razo LM. Potential Co-exposure to Arsenic and Fluoride and Biomonitoring Equivalents for Mexican Children. *Annals of Global Health*. 2018;84(2):257-73.

Lin C-W, Chuang C-Y, Tang C-H, Chang J-L, Lee L-M, Lee W-J, et al. Combined effects of icam-1 single-nucleotide polymorphisms and environmental carcinogens on oral cancer susceptibility and clinicopathologic development. *PloS one*. 2013;8(9):e72940.

Lin H, Guo Y, Kowal P, Airhihenbuwa CO, Di Q, Zheng Y, et al. Exposure to air pollution and tobacco smoking and their combined effects on depression in six low- and middle-income countries. *The British journal of psychiatry : the journal of mental science*. 2017;211(3):157-62.

Lin HL, Guo YF, Ruan ZL, Yang Y, Chen YB, Zheng Y, et al. Ambient PM_{2.5} and O₃ and their combined effects on prevalence of presbyopia among the elderly: A cross-sectional study in six low- and middle-income countries. *Science of the Total Environment*. 2019;655:168-73.

Lin HY, Zhang XH, Feng NN, Wang RY, Zhang WT, Deng XB, et al. LncRNA LCPAT1 Mediates Smoking/Particulate Matter 2.5-Induced Cell Autophagy and Epithelial-Mesenchymal Transition in Lung Cancer Cells via RCC2. *Cellular Physiology and Biochemistry*. 2018;47(3):1244-58.

Lin M, Afshari A, Azar E. A data-driven analysis of building energy use with emphasis on operation and maintenance: A case study from the UAE. *Journal of Cleaner Production*. 2018;192:169-78.

Lin M-C. Risk assessment on mixture toxicity of arsenic, zinc and copper intake from consumption of milkfish, *Chanos chanos* (Forsskal), cultured using contaminated groundwater in Southwest Taiwan. *Bulletin of environmental contamination and toxicology*. 2009;83(1):125-9.

Lin W, Guo HH, Wang LK, Zhang DD, Wu XY, Li L, et al. Nitrite Enhances MC-LR-Induced Changes on Splenic Oxidation Resistance and Innate Immunity in Male Zebrafish. *Toxins*. 2018;10(12).

Lin W, Jiang RF, Xiong YX, Wu JY, Xu JQ, Zheng J, et al. Quantification of the combined toxic effect of polychlorinated biphenyls and nano-sized polystyrene on *Daphnia magna*. *Journal of Hazardous Materials*. 2019;364:531-6.

Lin X, Gu Y, Zhou Q, Mao G, Zou B, Zhao J. Combined toxicity of heavy metal mixtures in liver cells. *Journal of applied toxicology : JAT*. 2016;36(9):1163-72.

Lin XL, Shao WZ, Yu FF, Xing K, Liu H, Zhang FE, et al. Individual and combined toxicity of T-2 toxin and deoxynivalenol on human C-28/I2 and rat primary chondrocytes. *Journal of Applied Toxicology*. 2019;39(2):343-53.

Lin Y, Guo HH, Li YF, Wang LK, Zhang DD, Hou J, et al. Single and combined exposure of microcystin-LR and nitrite results in reproductive endocrine disruption via hypothalamic-pituitary-gonadal-liver axis. *Chemosphere*. 2018;211:1137-46.

Lin YC, Chang CS, Ho PS, Lee CH, Chen JH, Huang HL. Immigrant-Native Differences in Sugar-Sweetened Beverage and Snack Consumption and Preventive Behaviors Associated with Severe Early Childhood Caries: A Large-Scale Survey in Taiwan. *International Journal of Environmental Research and Public Health*. 2019;16(6).

Lin YJ, Lin PP. Probabilistic Integrated Human Mixture Risk Assessment of Multiple Metals Through Seafood Consumption. *Risk Analysis*. 2019;39(2):426-38.

Lin YM, Chen AM, Yan SW, Rafay L, Du K, Wang DJ, et al. Available soil nutrients and water content affect leaf nutrient concentrations and stoichiometry at different ages of *Leucaena leucocephala* forests in dry-hot valley. *Journal of Soils and Sediments*. 2019;19(2):511-21.

Lin Z, Shi P, Gao S, Wang L, Yu H. Use of partition coefficients to predict mixture toxicity. *Water research*. 2003;37(9):2223-7.

Lin Z, Wang L, Shi P, Zhao D, Yin K. Development of a fragment constant method for estimating the mixture toxicity. *Archives of environmental contamination and toxicology*. 2004;46(1):1-7.

Lin Z, Yu H, Wei D, Wang G, Feng J, Wang L. Prediction of mixture toxicity with its total hydrophobicity. *Chemosphere*. 2002;46(2):305-10.

Lin Z, Zhong P, Yin K, Wang L, Yu H. Quantification of joint effect for hydrogen bond and development of QSARs for predicting mixture toxicity. *Chemosphere*. 2003;52(7):1199-208.

Lindim C, de Zwart D, Cousins IT, Kutsarova S, Kuhne R, Schuurmann G. Exposure and ecotoxicological risk assessment of mixtures of top prescribed pharmaceuticals in Swedish freshwaters. *Chemosphere*. 2019;220:344-52.

Ling ZD, Chang Q, Lipton JW, Tong CW, Landers TM, Carvey PM. Combined toxicity of prenatal bacterial endotoxin exposure and postnatal 6-hydroxydopamine in the adult rat midbrain. *Neuroscience*. 2004;124(3):619-28.

Lionetti V. Simultaneous exposure to nitric oxide inhibition and angiotensin II overload: is it a murine model of mitochondrial dysfunction in nonischemic heart failure? *American journal of physiology Heart and circulatory physiology*. 2016;310(11):H1385-7.

Lipshits RU, Kratinova MA. Acetylcholine and cholinesterase activity following combined exposure of an organism to an allergen and radiation. *Radiobiologia*. 1977;17(2):296-9.

Litvinov NN, Kazachkov VI, Astakhova LF, Gasimova ZM. Combined effects of embryotoxic and teratogenic environmental chemical factors (review of the literature). *Gigiena i sanitaria*. 1990(11):80-2.

Liu CB, Zhang L, Wu Q, Qu GB, Yin YG, Hu LG, et al. Mutual detoxification of mercury and selenium in unicellular *Tetrahymena*. *Journal of Environmental Sciences*. 2018;68:143-50.

Liu F, Kendall RJ, Theodorakis CW. Joint toxicity of sodium arsenate and sodium perchlorate to zebrafish *Danio rerio* larvae. *Environmental toxicology and chemistry*. 2005;24(6):1505-7.

Liu H, Huang QY, Sun HZ, Li JM, Lin QW, Wu HM, et al. Effects of separate or combined exposure of nonylphenol and octylphenol on central 5-HT

system and related learning and memory in the rats. *Ecotoxicology and Environmental Safety*. 2019;172:523-9.

Liu H-H, Zhao T-B, Li Z-L. Changes of serum urea and creatinine concentrations in rats with lipopolysaccharide and heat co-exposure. *Nan fang yi ke da xue xue bao = Journal of Southern Medical University*. 2008;28(1):86-8.

Liu HY, Qi XZ, Gong HB, Li LH, Zhang MY, Li YF, et al. Combined Effects of Global Climate Suitability and Regional Environmental Variables on the Distribution of an Invasive Marsh Species *Spartina alterniflora*. *Estuaries and Coasts*. 2019;42(1):99-111.

Liu J, Guo L, Zhang K, Song Q, Wei Q, Bian Q, et al. The probable roles of valsartan in alleviating chronic obstructive pulmonary disease following co-exposure to cold stress and fine particulate matter. *Environmental toxicology and pharmacology*. 2018;60:230-6.

Liu J, Lincoln T, An J, Gao Z, Dang Z, Pan W, et al. The Joint Toxicity of Different Temperature Coefficient Insecticides on *Apolygus lucorum* (Hemiptera: Miridae). *Journal of economic entomology*. 2016;109(4):1846-52.

Liu J, Liu Y, Habeebu SM, Waalkes MP, Klaassen CD. Chronic combined exposure to cadmium and arsenic exacerbates nephrotoxicity, particularly in metallothionein-I/II null mice. *Toxicology*. 2000;147(3):157-66.

Liu J, Qu R, Yan L, Wang L, Wang Z. Evaluation of single and joint toxicity of perfluorooctane sulfonate and zinc to *Limnodrilus hoffmeisteri*: Acute toxicity, bioaccumulation and oxidative stress. *Journal of hazardous materials*. 2016;301:342-9.

Liu JF, Sun LM, Zhang HQ, Shi MR, Dahlgren RA, Wang XD, et al. Response mechanisms to joint exposure of triclosan and its chlorinated derivatives on zebrafish (*Danio rerio*) behavior. *Chemosphere*. 2018;193:820-32.

Liu JJ, Zhao HJ, Wang Y, Shao YZ, Zhang LN, Xing MW. Impacts of simultaneous exposure to arsenic (III) and copper (II) on inflammatory response, immune homeostasis, and heat shock response in chicken thymus. *International Immunopharmacology*. 2018;64:60-8.

Liu JT, Guo L, Zhang K, Song QQ, Wei QZ, Bian Q, et al. The probable roles of valsartan in alleviating chronic obstructive pulmonary disease following co-exposure to cold stress and fine particulate matter. *Environmental Toxicology and Pharmacology*. 2018;60:230-6.

Liu LX, Tans PP, Xia LJ, Zhou LX, Zhang F. Analysis of patterns in the concentrations of atmospheric greenhouse gases measured in two typical urban clusters in China. *Atmospheric Environment*. 2018;173:343-54.

Liu MH, Korpelainen H, Dong LC, Yi LT. Physiological responses of *Elaeocarpus glabripetalus* seedlings exposed to simulated acid rain and cadmium. *Ecotoxicology and Environmental Safety*. 2019;175:118-27.

Liu MQ, Ding Y, Peng SM, Lu Y, Dang Z, Shi ZQ. Molecular fractionation of dissolved organic matter on ferrihydrite: effects of dissolved cations. *Environmental Chemistry*. 2019;16(2):137-48.

Liu N, Wang YP, Ge F, Liu SX, Xiao HX. Antagonistic effect of nano-ZnO and cetyltrimethyl ammonium chloride on the growth of *Chlorella vulgaris*: Dissolution and accumulation of nano-ZnO. *Chemosphere*. 2018;196:566-74.

Liu N, Zhong GD, Zhou JN, Liu YL, Pang YJ, Cai H, et al. Separate and combined effects of glyphosate and copper on growth and antioxidative enzymes in *Salvinia natans* (L.) All. *Science of the Total Environment*. 2019;655:1448-56.

Liu QS, Liu GH, Huang C, Li H. Remote Sensing Monitoring of Surface Characteristics in the Badain Jaran, Tengger, and Ulan Buh Deserts of China. *Chinese Geographical Science*. 2019;29(1):151-65.

Liu S, Cui MM, Li XM, Thuyet DQ, Fan WH. Effects of hydrophobicity of titanium dioxide nanoparticles and exposure scenarios on copper uptake and toxicity in *Daphnia magna*. *Water Research*. 2019;154:162-70.

Liu S-S, Wang C-L, Zhang J, Zhu X-W, Li W-Y. Combined toxicity of pesticide mixtures on green algae and photobacteria. *Ecotoxicology and environmental safety*. 2013;95:98-103.

Liu T, Zhang C-h, Zhang P. A meta-analysis on combined effects of benzene series and noise exposure on hearing. *Zhonghua lao dong wei sheng zhi ye bing za zhi* = *Zhonghua laodong weisheng zhiyebing zazhi* = Chinese journal of industrial hygiene and occupational diseases. 2012;30(10):769-71.

Liu TF, Wang T, Sun C, Wang YM. Single and joint toxicity of cypermethrin and copper on Chinese cabbage (Pakchoi) seeds. *Journal of hazardous materials*. 2009;163(1):344-8.

Liu W, Zhang Z, Yang X, Xu Y, Liang Y. Effects of UV irradiation and UV/chlorine co-exposure on natural organic matter in water. *The Science of the total environment*. 2012;414:576-84.

Liu WY, Wang LQ, Zheng CF, Liu LB, Wang J, Li DB, et al. Microcystin-LR increases genotoxicity induced by aflatoxin B1 through oxidative stress and DNA base excision repair genes in human hepatic cell lines. *Environmental Pollution*. 2018;233:455-63.

Liu X, Zhang HZ, Pan WX, Xue Q, Fu JJ, Liu GR, et al. A novel computational solution to the health risk assessment of air pollution via joint toxicity prediction: A case study on selected PAH binary mixtures in particulate matters. *Ecotoxicology and Environmental Safety*. 2019;170:427-35.

Liu X, Zhang S, Shan X-Q, Christie P. Combined toxicity of cadmium and arsenate to wheat seedlings and plant uptake and antioxidative enzyme responses to cadmium and arsenate co-contamination. *Ecotoxicology and environmental safety*. 2007;68(2):305-13.

Liu XD, Zhang YC, Yang X. Vitamin E reduces the extent of mouse brain damage induced by combined exposure to formaldehyde and PM2.5. *Ecotoxicology and Environmental Safety*. 2019;172:33-9.

Liu XH, Lu SY, Meng W, Wang WL. Occurrence, source, and ecological risk of antibiotics in Dongting Lake, China. *Environmental Science and Pollution Research*. 2018;25(11):11063-73.

Liu Y, Baas J, Peijnenburg WJGM, Vijver MG. Evaluating the Combined Toxicity of Cu and ZnO Nanoparticles: Utility of the Concept of Additivity and a Nested Experimental Design. *Environmental science & technology*. 2016;50(10):5328-37.

Liu Y, Guo R, Tang S, Zhu F, Zhang S, Yan Z, et al. Single and mixture toxicities of BDE-47, 6-OH-BDE-47 and 6-MeO-BDE-47 on the feeding activity of *Daphnia magna*: From behavior assessment to neurotoxicity. *Chemosphere*. 2018;195:542-50.

Liu Y, Li Y, Li L, Zhu Y, Liu J, Li G, et al. Attenuation of Sulfur Dioxide Damage to Wheat Seedlings by Co-exposure to Nitric Oxide. *Bulletin of environmental contamination and toxicology*. 2017;99(1):146-51.

Liu Y, Nie YG, Wang JJ, Wang J, Wang X, Chen SP, et al. Mechanisms involved in the impact of engineered nanomaterials on the joint toxicity with environmental pollutants. *Ecotoxicology and Environmental Safety*. 2018;162:92-102.

Liu YH, Guo RX, Tang SK, Zhu FY, Zhang SH, Yan ZY, et al. Single and mixture toxicities of BDE-47, 6-OH-BDE-47 and 6-MeO-BDE-47 on the feeding

activity of *Daphnia magna*: From behavior assessment to neurotoxicity. *Chemosphere*. 2018;195:542-50.

Liu YH, Wang S, Wang Z, Ye N, Fang H, Wang DG. TiO₂, SiO₂ and ZrO₂ Nanoparticles Synergistically Provoke Cellular Oxidative Damage in Freshwater Microalgae. *Nanomaterials*. 2018;8(2).

Liu YH, Wang Z, Wang S, Fang H, Ye N, Wang DG. Ecotoxicological effects on *Scenedesmus obliquus* and *Danio rerio* Co-exposed to polystyrene nanoplastic particles and natural acidic organic polymer. *Environmental Toxicology and Pharmacology*. 2019;67:21-8.

Liu YH, Yan ZY, Zhang L, Deng ZJC, Yuan JF, Zhang SH, et al. Food uptake and reproduction performance of *Daphnia magna* under the exposure of Bisphenols. *Ecotoxicology and Environmental Safety*. 2019;170:47-54.

Liu YM, Zhang H, He FM, Li XS, Tan HH, Zeng DQ. Combined toxicity of chlorantraniliprole, lambda-cyhalothrin, and imidacloprid to the silkworm *Bombyx mori* (Lepidoptera: Bombycidae). *Environmental Science and Pollution Research*. 2018;25(23):22598-605.

Liu YY, Fan WH, Xu ZZ, Peng WH, Luo SL. Comparative effects of graphene and graphene oxide on copper toxicity to *Daphnia magna*: Role of surface oxygenic functional groups. *Environmental Pollution*. 2018;236:962-70.

Lizotte RE, Jr., Moore MT, Locke MA, Kroger R. Role of vegetation in a constructed wetland on nutrient-pesticide mixture toxicity to *Hyalella azteca*. *Archives of environmental contamination and toxicology*. 2011;60(2):261-71.

Ljubimova JY, Braubach O, Patil R, Chiechi A, Tang J, Galstyan A, et al. Coarse particulate matter (PM_{2.5-10}) in Los Angeles Basin air induces expression of inflammation and cancer biomarkers in rat brains. *Scientific Reports*. 2018;8.

Ljungberg J, Neely G, Lundstrom R. Cognitive performance and subjective experience during combined exposures to whole-body vibration and noise. *International archives of occupational and environmental health*. 2004;77(3):217-21.

Loche E, Blackmore HL, Carpenter AA, Beeson JH, Pinnock A, Ashmore TJ, et al. Maternal diet-induced obesity programmes cardiac dysfunction in male mice independently of post-weaning diet. *Cardiovascular Research*. 2018;114(10):1372-84.

Lock K, Janssen CR. Mixture toxicity of zinc, cadmium, copper, and lead to the potworm *Enchytraeus albidus*. *Ecotoxicology and environmental safety*. 2002;52(1):1-7.

Logvinov SV, Potapov AV. Structural changes to the retina in combined exposure to light and x-rays. *Morfologiya* (Saint Petersburg, Russia). 2000;117(1):19-23.

Lohani M, Dopp E, Weiss DG, Schiffmann D, Rahman Q. Kerosene soot genotoxicity: enhanced effect upon co-exposure with chrysotile asbestos in Syrian hamster embryo fibroblasts. *Toxicology letters*. 2000;114(1-3):111-6.

Loizou GD, McNally K, Jones K, Cocker J. The application of global sensitivity analysis in the development of a physiologically based pharmacokinetic model for m-xylene and ethanol co-exposure in humans. *Frontiers in pharmacology*. 2015;6:135.

Long X, Wang D, Lin Z, Qin M, Song C, Liu Y. The mixture toxicity of environmental contaminants containing sulfonamides and other antibiotics in *Escherichia coli*: Differences in both the special target proteins of individual chemicals and their effective combined concentration. *Chemosphere*. 2016;158:193-203.

Lopaev DV, Zyryanov SM, Zotovich AI, Rakhimova TV, Mankelevich YA, Rakhimov AT, et al. Synergistic effect of VUV photons and F atoms on damage and etching of porous organosilicate films. *Plasma Processes and Polymers*. 2018;15(4).

Lopes S, Pinheiro C, Soares AMVM, Loureiro S. Joint toxicity prediction of nanoparticles and ionic counterparts: Simulating toxicity under a fate scenario. *Journal of hazardous materials*. 2016;320:1-9.

Lopez-Abbate MC, Molinero JC, Perillo GME, de Cao MSB, Pettigrosso RE, Guinder VA, et al. Long-term changes on estuarine ciliates linked with modifications on wind patterns and water turbidity. *Marine Environmental Research*. 2019;144:46-55.

Lopez-Furelos A, Salas-Sanchez AA, Ares-Pena FJ, Leiro-Vidal JM, Lopez-Martin E. Exposure to radiation from single or combined radio frequencies provokes macrophage dysfunction in the RAW 264.7 cell line. *International Journal of Radiation Biology*. 2018;94(6):607-18.

Loprinzi PD. Combined effects of accelerometer-assessed physical activity and dietary behavior on all-cause mortality in a national prospective cohort study. *International journal of cardiology*. 2015;201:258-9.

Loquet G, Campo P, Lataye R, Cossec B, Bonnet P. Combined effects of exposure to styrene and ethanol on the auditory function in the rat. *Hearing research*. 2000;148(1-2):173-80.

Lorenz N, Danicke S, Edler L, Gottschalk C, Lassek E, Marko D, et al. A critical evaluation of health risk assessment of modified mycotoxins with a special focus on zearalenone. *Mycotoxin Research*. 2019;35(1):27-46.

Loshadkin NA, Gladkikh VD, Kolosova NA, Sinitsyn AN, Goldenkov VA. The use of probit-method for an estimation of toxic effects of combined toxicants at low concentration levels. *Radiatsionnaia biologii, radioecologii*. 2003;43(3):337-40.

Lotufo GR, Stanley JK, Chappell P, Melby NL, Wilbanks MS, Gust KA. Subchronic, chronic, lethal and sublethal toxicity of insensitive munitions mixture formulations relative to individual constituents in *Hyalella azteca*. *Chemosphere*. 2018;210:795-804.

Lou J, Jin L, Wu N, Tan Y, Song Y, Gao M, et al. DNA damage and oxidative stress in human B lymphoblastoid cells after combined exposure to hexavalent chromium and nickel compounds. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2013;55:533-40.

Loureiro S, Amorim MJB, Campos B, Rodrigues SMG, Soares AMVM. Assessing joint toxicity of chemicals in *Enchytraeus albidus* (Enchytraeidae) and *Porcellionides pruinosus* (Isopoda) using avoidance behaviour as an endpoint. *Environmental pollution (Barking, Essex : 1987)*. 2009;157(2):625-36.

Lourenco LM, Jiang Y, Drobnitzky N, Green M, Cahill F, Patel A, et al. PARP Inhibition Combined With Thoracic Irradiation Exacerbates Esophageal and Skin Toxicity in C57BL6 Mice. *International journal of radiation oncology, biology, physics*. 2018;100(3):767-75.

Lu C, Wang Y, Sheng Z, Liu G, Fu Z, Zhao J, et al. NMR-based metabonomic analysis of the hepatotoxicity induced by combined exposure to PCBs and TCDD in rats. *Toxicology and applied pharmacology*. 2010;248(3):178-84.

Lu C-F, Li L-Z, Zhou W, Zhao J, Wang Y-M, Peng S-Q. Silica nanoparticles and lead acetate co-exposure triggered synergistic cytotoxicity in A549 cells through potentiation of mitochondria-dependent apoptosis induction. *Environmental toxicology and pharmacology*. 2017;52:114-20.

Lu C-F, Yuan X-Y, Li L-Z, Zhou W, Zhao J, Wang Y-M, et al. Combined exposure to nano-silica and lead induced potentiation of oxidative stress and DNA damage in human lung epithelial cells. *Ecotoxicology and environmental safety*. 2015;122:537-44.

Lu CL, Svoboda KR, Lenz KA, Pattison C, Ma HB. Toxicity interactions between manganese (Mn) and lead (Pb) or cadmium (Cd) in a model organism the nematode *C. elegans*. *Environmental Science and Pollution Research*. 2018;25(16):15378-89.

Lu G, Wang C, Tang Z, Guo X. Joint toxicity of aromatic compounds to algae and QSAR study. *Ecotoxicology (London, England)*. 2007;16(7):485-90.

Lu GH, Qin DH, Wang YH, Liu JC, Chen W. Single and combined effects of selected haloacetonitriles in a human-derived Check for hepatoma line. *Ecotoxicology and Environmental Safety*. 2018;163:417-26.

Lu GH, Wang C, Tang ZY, Guo XL. Quantitative structure-activity relationships for predicting the joint toxicity of substituted anilines and phenols to algae. *Bulletin of environmental contamination and toxicology*. 2007;78(1):73-7.

Lu GH, Wang C, Tang ZY, Guo XL. Quantitative structure-activity relationships for predicting the joint toxicity of substituted anilines and phenols to algae. *Bulletin of environmental contamination and toxicology*. 2007;78(2):107-11.

Lu GH, Wang C, Wang PF, Chen ZY. Joint toxicity evaluation and QSAR modeling of aromatic amines and phenols to bacteria. *Bulletin of environmental contamination and toxicology*. 2009;83(1):8-14.

Lu G-h, Wu H, Chen Z-y, Li Y. Quantitative structure-activity relationships of joint toxicity of 3, 4-dichloroaniline and substituted aromatics. *Huan jing ke xue= Huanjing kexue*. 2009;30(10):3104-9.

Lu J, Roth RA, Malle E, Ganey PE. Roles of the hemostatic system and neutrophils in liver injury from co-exposure to amiodarone and lipopolysaccharide. *Toxicological sciences : an official journal of the Society of Toxicology*. 2013;136(1):51-62.

Lu K, Qiao RX, An H, Zhang Y. Influence of microplastics on the accumulation and chronic toxic effects of cadmium in zebrafish (*Danio rerio*). *Chemosphere*. 2018;202:514-20.

Lubecka K, Kaufman-Szymczyk A, Cebula-Obrzut B, Smolewski P, Szemraj J, Fabianowska-Majewska K. Novel Clofarabine-Based Combinations with Polyphenols Epigenetically Reactivate Retinoic Acid Receptor Beta, Inhibit Cell Growth, and Induce Apoptosis of Breast Cancer Cells. *International Journal of Molecular Sciences*. 2018;19(12).

Luben TJ, Buckley BJ, Patel MM, Stevens T, Coffman E, Rappazzo KM, et al. A cross-disciplinary evaluation of evidence for multipollutant effects on cardiovascular disease. *Environmental Research*. 2018;161:144-52.

Lucia G, Carmelina S, Simonetta M, Lorenzo B, Eliana T, Stefania B, et al. An integrated approach to highlight biological responses of *Pisum sativum* root to nano-TiO₂ exposure in a biosolid-amended agricultural soil. *Science of the Total Environment*. 2019;650:2705-16.

Lucia Scherholz de Castro V, Heloisa Chiorato S. Effects of separate and combined exposure to the pesticides methamidophos and chlorothalonil on the development of suckling rats. *International journal of hygiene and environmental health*. 2007;210(2):169-76.

Luna B, Bhatia S, Yoo C, Felty Q, Sandberg DI, Duchowny M, et al. Bayesian network and mechanistic hierarchical structure modeling of increased likelihood of developing intractable childhood epilepsy from the combined effect of mtDNA variants, oxidative damage, and copy number. *Journal of molecular neuroscience : MN*. 2014;54(4):752-66.

Lund SP, Kristiansen GB. Hazards to hearing from combined exposure to toluene and noise in rats. *International journal of occupational medicine and environmental health*. 2008;21(1):47-57.

Luo B, Shi HX, Zhang K, Wei QZ, Niu JP, Wang JL, et al. Cold stress provokes lung injury in rats co-exposed to fine particulate matter and lipopolysaccharide. *Ecotoxicology and Environmental Safety*. 2019;168:9-16.

Luo C, Liang J. Evaluation of combined toxic effects of GB/GF and efficacy of jielin injection against combined poisoning in mice. *Toxicology letters*. 1997;92(3):195-200.

Luo J, Cai LM, Qi SH, Wu J, Gu XWS. The interactive effects between chelator and electric fields on the leaching risk of metals and the phytoremediation efficiency of *Eucalyptus globulus*. *Journal of Cleaner Production*. 2018;202:830-7.

Luo L, Hudson LG, Lewis J, Lee JH. Two-step approach for assessing the health effects of environmental chemical mixtures: application to simulated datasets and real data from the Navajo Birth Cohort Study. *Environmental Health*. 2019;18.

Luo S, Liu X, Wang C. Co-carcinogenic effect of crocidolite plus benzo(a)pyrene on the lungs of rats. *Hua xi yi ke da xue xue bao = Journal of West China University of Medical Sciences = Huaxi yike daxue xuebao*. 1995;26(2):202-5.

Luo Y, Li X, Li J, Wang X, Qiao Y, Hu D, et al. Combined effects of smoking and peripheral arterial disease on all-cause and cardiovascular disease mortality in a Chinese male cohort. *Journal of vascular surgery*. 2010;51(3):673-8.

Lushnikov EF, Svinogeeva TP, Shtein LV, Konopliannikov AG. Morphology of rat rhabdomyosarcoma after separate and combined exposure to ionizing radiation and hyperthermia. *Meditinskaya radiologiya*. 1981;26(8):53-60.

Lutz WK, Vamvakas S, Kopp-Schneider A, Schlatter J, Stopper H. Deviation from additivity in mixture toxicity: relevance of nonlinear dose-response relationships and cell line differences in genotoxicity assays with combinations of chemical mutagens and gamma-radiation. *Environmental health perspectives*. 2002;110 Suppl 6:915-8.

Luukkonen J, Juutilainen J, Naarala J. Combined effects of 872 MHz radiofrequency radiation and ferrous chloride on reactive oxygen species production and DNA damage in human SH-SY5Y neuroblastoma cells. *Bioelectromagnetics*. 2010;31(6):417-24.

Luzio A, Monteiro SM, Rocha E, Fontainhas-Fernandes AA, Coimbra AM. Development and recovery of histopathological alterations in the gonads of zebrafish (*Danio rerio*) after single and combined exposure to endocrine disruptors (17alpha-ethinylestradiol and fadrozole). *Aquatic toxicology (Amsterdam, Netherlands)*. 2016;175:90-105.

Lv LY, Li WG, Yu Y, Meng LQ, Qin W, Wu CD. Predicting acute toxicity of traditional Chinese medicine wastewater using UV absorption and volatile fatty acids as surrogates. *Chemosphere*. 2018;194:211-9.

Lv Y, Zhou YW, Wang HF, Zhao TK, Liu T, He X, et al. Study on the multivariate prediction model and exposure level of indoor and outdoor particulate concentration in severe cold region of China. *Ecotoxicology and Environmental Safety*. 2019;170:708-15.

Lynch GR. Effect of simultaneous exposure to differences in photoperiod and temperature on the seasonal molt and reproductive system of the white-footed mouse, *Peromyscus leucopus*. *Comparative biochemistry and physiology A, Comparative physiology*. 1973;44(4):1373-6.

Lysek-Gladysinska M, Wieczorek A, Walaszczyk A, Jelonek K, Jozwik A, Pietrowska M, et al. Long-term effects of low-dose mouse liver irradiation involve ultrastructural and biochemical changes in hepatocytes that depend on lipid metabolism. *Radiation and Environmental Biophysics*. 2018;57(2):123-32.

Ma J, Guo AY, Wang SH, Man SL, Zhang YJ, Liu SJ, et al. From the lung to the knee joint: Toxicity evaluation of carbon black nanoparticles on macrophages and chondrocytes. *Journal of Hazardous Materials*. 2018;353:329-39.

Ma J, Huang C, Ma K, Wu Y-P, Li B-X, Sun Y. Effect of Wnt1 and Wnt5a on the development of dopaminergic neurons, and toxicity induced by combined exposure to paraquat and maneb during gestation and lactation. *Molecular medicine reports*. 2017.

Ma YL, Gerhardt KJ, Curtis LM, Rybak LP, Whitworth C, Rarey KE. Combined effects of adrenalectomy and noise exposure on compound action potentials, endocochlear potentials and endolymphatic potassium concentrations. *Hearing research*. 1995;91(1-2):79-86.

Maazouzi C, Coureau C, Piscart C, Saplaïroles M, Baran N, Marmonier P. Individual and joint toxicity of the herbicide S-metolachlor and a metabolite, deethylatrazine on aquatic crustaceans: Difference between ecological groups. *Chemosphere*. 2016;165:118-25.

Macario IPE, Jesus F, Pereira JL, Ventura SPM, Goncalves AMM, Coutinho JAP, et al. Unraveling the ecotoxicity of deep eutectic solvents using the mixture toxicity theory. *Chemosphere*. 2018;212:890-7.

MacDonell MM, Hertzberg RC, Rice GE, Wright JM, Teuschler LK. Characterizing Risk for Cumulative Risk Assessments. *Risk Analysis*. 2018;38(6):1183-201.

Machado SC, Martins I. Risk assessment of occupational pesticide exposure: Use of endpoints and surrogates. *Regulatory Toxicology and Pharmacology*. 2018;98:276-83.

Macias G, Marco A, Blaustein AR. Combined exposure to ambient UVB radiation and nitrite negatively affects survival of amphibian early life stages. *The Science of the total environment*. 2007;385(1-3):55-65.

Maestre-Batlle D, Huff RD, Wooding D, Bolling AK, Carlsten C. Lower Airway Immune Response to Di-Butyl Phthalate (DBP) and Allergen Co-Exposure. *American Journal of Respiratory and Critical Care Medicine*. 2018;197.

Magara G, Elia AC, Syberg K, Khan FR. Single contaminant and combined exposures of polyethylene microplastics and fluoranthene: accumulation and oxidative stress response in the blue mussel, *Mytilus edulis*. *Journal of Toxicology and Environmental Health-Part a-Current Issues*. 2018;81(16):761-73.

Mager EM, Pasparakis C, Stieglitz JD, Hoenig R, Morris JM, Benetti DD, et al. Combined effects of hypoxia or elevated temperature and Deepwater Horizon crude oil exposure on juvenile mahi-mahi swimming performance. *Marine environmental research*. 2018.

Mager EM, Pasparakis C, Stieglitz JD, Hoenig R, Morris JM, Benetti DD, et al. Combined effects of hypoxia or elevated temperature and Deepwater Horizon crude oil exposure on juvenile mahi-mahi swimming performance. *Marine Environmental Research*. 2018;139:129-35.

Maglovski M, Gersi Z, Rybansky L, Bardacova M, Moravcikova J, Bujdos M, et al. Effects of Nutrition on Wheat Photosynthetic Pigment Responses to Arsenic Stress. *Polish Journal of Environmental Studies*. 2019;28(3):1821-9.

Magnusson M, Heimann K, Quayle P, Negri AP. Additive toxicity of herbicide mixtures and comparative sensitivity of tropical benthic microalgae. *Marine pollution bulletin*. 2010;60(11):1978-87.

Mahajan L, Verma PK, Raina R, Sood S. Toxic effects of imidacloprid combined with arsenic: Oxidative stress in rat liver. *Toxicology and Industrial Health*. 2018;34(10):726-35.

Mahmoud MH, Bassuoni MT. Performance of Concrete with Alkali-Activated Materials and Nanosilica in Acidic Environments. *Journal of Materials in Civil Engineering*. 2019;31(3).

Mahmoud WMM, Toolaram AP, Menz J, Leder C, Schneider M, Kummerer K. Identification of phototransformation products of thalidomide and mixture

toxicity assessment: an experimental and quantitative structural activity relationships (QSAR) approach. *Water research*. 2014;49:11-22.

Maier A, Schumann BL, Chang X, Talaska G, Puga A. Arsenic co-exposure potentiates benzo a pyrene genotoxicity. *Mutation research*. 2002;517(1-2):101-11.

Main BJ, Rodgers KJ. Assessing the Combined Toxicity of BMAA and Its Isomers 2,4-DAB and AEG In Vitro Using Human Neuroblastoma Cells. *Neurotoxicity research*. 2017.

Main BJ, Rodgers KJ. Assessing the Combined Toxicity of BMAA and Its Isomers 2,4-DAB and AEG In Vitro Using Human Neuroblastoma Cells. *Neurotoxicity Research*. 2018;33(1):33-42.

Makita Y, Omura M, Ogata R. Effects of perinatal simultaneous exposure to tributyltin (TBT) and p,p'-DDE 1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene) on male offspring of Wistar rats. *Journal of toxicology and environmental health Part A*. 2004;67(5):385-95.

Makita Y, Omura M. Effects of perinatal combined exposure to 1,1-dichloro-2,2 bis (p-chlorophenyl) ethylene and tributyltin on male reproductive system. *Basic & clinical pharmacology & toxicology*. 2006;99(2):128-32.

Makita Y, Omura M. Normal Development of Reproductive System in Rat Male Offspring Following Perinatal Combined Exposure to p,p'-DDE and 1,4-Dichlorobenzene. *Toxicology mechanisms and methods*. 2006;16(1):7-11.

Makita Y. Effects of perinatal combined exposure to 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (p,p'-DDE) and tributyltin (TBT) on rat female reproductive system. *Environmental toxicology and pharmacology*. 2008;25(3):380-5.

Makita Y. Effects of perinatal combined exposure to 1,4-dichlorobenzene and 1,1-dichloro-2, 2-bis (p-chlorophenyl) ethylene (p,p'-DDE) on rat female offspring. *Basic & clinical pharmacology & toxicology*. 2004;95(3):139-43.

Makita Y. Effects of perinatal combined exposure to 1,4-dichlorobenzene and 1,1-dichloro-2, 2-bis (p-chlorophenyl) ethylene on rat male offspring. *Basic & clinical pharmacology & toxicology*. 2005;96(5):361-5.

Makita Y. Effects of perinatal, combined exposure to 1,4-dichlorobenzene and 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene on rat female reproductive system. *Basic & clinical pharmacology & toxicology*. 2008;102(4):360-4.

Maksimov GG, Burenko GN, Ibatullina RB. Experimental study of the isolated and combined effects of BR-1 benzine at standard exposure levels in

different external environments. *Gigiena truda i professional'nye zabolevaniia*. 1984(3):34-7.

Malavelle FF, Haywood JM, Mercado LM, Folberth GA, Bellouin N, Sitch S, et al. Studying the impact of biomass burning aerosol radiative and climate effects on the Amazon rainforest productivity with an Earth system model. *Atmospheric Chemistry and Physics*. 2019;19(2):1301-26.

Malekpouri P, Peyghan R, Mahboobi-Soofiani N, Mohammadian B. Metabolic capacities of common carp (*Cyprinus carpio*) following combined exposures to copper and environmental hypoxia. *Ecotoxicology and environmental safety*. 2016;127:1-11.

Malenchenko AF, Dorozhenkova TE. Pulmonary macrophages during combined exposure to ionizing radiation and nitrogen oxides. *Radiatsionnaia biologiiia, radioecologiiia*. 1994;34(4-5):502-8.

Maloney EM, Liber K, Headley JV, Peru KM, Morrissey CA. Neonicotinoid insecticide mixtures: Evaluation of laboratory-based toxicity predictions under semi-controlled field conditions. *Environmental Pollution*. 2018;243:1727-39.

Maloney EM, Morrissey CA, Headley JV, Peru KM, Liber K. Can chronic exposure to imidacloprid, clothianidin, and thiamethoxam mixtures exert greater than additive toxicity in *Chironomus dilutus*? *Ecotoxicology and Environmental Safety*. 2018;156:354-65.

Maltoni C, Prodi G. Morphological & histochemical reconstitution of the skin in rabbit following administration of carcinogenic & co-carcinogenic substances. *Tumori*. 1957;43(5):477-83.

Manenko AK, Ivanova OP, Biriukova NA. Comparative assessment of methods of determination of CL50, Lim ac and resulting combined effects of simultaneous and successive inhalation exposure to 2 and more chemical factors. *Gigiena i sanitariia*. 1991(2):80-3.

Manenko AK, Ivanova OP. Comparative characteristics of methods of mathematical evaluation of the combined effects of 2 or more harmful chemical factors in their single and successive administration in acute experiments. *Gigiena i sanitariia*. 1988(11):55-8.

Manenko AK. Method for the quantitative evaluation of the combined effect on the body of 2 or more harmful chemical factors. *Gigiena i sanitariia*. 1982(10):70-2.

Manesh RR, Grassi G, Bergami E, Marques-Santos LF, Faleri C, Liberatori G, et al. Co-exposure to titanium dioxide nanoparticles does not affect cadmium toxicity in radish seeds (*Raphanus sativus*). *Ecotoxicology and Environmental Safety*. 2018;148:359-66.

Manimaran A, Sarkar SN, Sankar P. Toxicodynamics of subacute co-exposure to groundwater contaminant arsenic and analgesic-antipyretic drug acetaminophen in rats. *Ecotoxicology and environmental safety*. 2010;73(1):94-100.

Manning DWP, Rosemond AD, Gulis V, Benstead JP, Kominoski JS. Nutrients and temperature additively increase stream microbial respiration. *Global Change Biology*. 2018;24(1):E233-E47.

Mansouri B, Maleki A, Johari SA, Shahmoradi B, Mohammadi E, Shahsavari S, et al. Copper Bioaccumulation and Depuration in Common Carp (*Cyprinus carpio*) Following Co-exposure to TiO₂ and CuO Nanoparticles. *Archives of environmental contamination and toxicology*. 2016;71(4):541-52.

Manu DS, Thalla AK. The combined effects of carbon/nitrogen ratio, suspended biomass, hydraulic retention time and dissolved oxygen on nutrient removal in a laboratory-scale anaerobic-anoxic-oxic activated sludge biofilm reactor. *Water Science and Technology*. 2018;77(1):248-59.

Mao F, He Y, Gin KY-H. Evaluating the Joint Toxicity of Two Benzophenone-Type UV Filters on the Green Alga *Chlamydomonas reinhardtii* with Response Surface Methodology. *Toxics*. 2018;6(1).

Mao FJ, He YL, Gin KYH. Evaluating the Joint Toxicity of Two Benzophenone-Type UV Filters on the Green Alga *Chlamydomonas reinhardtii* with Response Surface Methodology. *Toxics*. 2018;6(1).

Mao WF, Song Y, Sui HX, Cao P, Liu ZP. Analysis of individual and combined estrogenic effects of bisphenol, nonylphenol and diethylstilbestrol in immature rats with mathematical models. *Environmental Health and Preventive Medicine*. 2019;24(1).

Marat I, Arstan M, Galymzhan Y, Timur J, Yerbolat I, Almasbek Y. Impact of chromium and boron compounds on the reproductive function in rats. *Toxicology and Industrial Health*. 2018;34(6):365-74.

Margerit A, Gomez E, Gilbin R. Dynamic energy-based modeling of uranium and cadmium joint toxicity to *Caenorhabditis elegans*. *Chemosphere*. 2016;146:405-12.

Margerit A, Lecomte-Pradines C, Svendsen C, Frelon S, Gomez E, Gilbin R. Nested interactions in the combined toxicity of uranium and cadmium to the nematode *Caenorhabditis elegans*. *Ecotoxicology and environmental safety*. 2015;118:139-48.

Marhuenda D, Prieto MJ, Periago JF, Marti J, Perbellini L, Cardona A. Biological monitoring of styrene exposure and possible interference of acetone co-exposure. *International archives of occupational and environmental health*. 1997;69(6):455-60.

Markelewicz RJ, Jr., Hall SJ, Boekelheide K. 2,5-hexanedione and carbendazim coexposure synergistically disrupts rat spermatogenesis despite opposing molecular effects on microtubules. *Toxicological sciences : an official journal of the Society of Toxicology*. 2004;80(1):92-100.

Markert A, Baumann R, Gerhards B, Gube M, Kossack V, Kraus T, et al. Single and Combined Exposure to Zinc- and Copper-Containing Welding Fumes Lead to Asymptomatic Systemic Inflammation. *Journal of occupational and environmental medicine*. 2016;58(2):127-32.

Marovic D, Tadin A, Mladinic M, Juric-Kacunic D, Galic N. In vitro detection of DNA damage in human leukocytes induced by combined effect of resin composites and adhesive systems. *American journal of dentistry*. 2014;27(1):35-41.

Marples B, Downing L, Sawarynski KE, Finkelstein JN, Williams JP, Martinez AA, et al. Pulmonary injury after combined exposures to low-dose low-LET radiation and fungal spores. *Radiation research*. 2011;175(4):501-9.

Marquez-Rosado L, Trejo-Solis C, Cabrales-Romero MdP, Arce-Popoca E, Sierra-Santoyo A, Aleman-Lazarini L, et al. Co-carcinogenic effect of cyclohexanol on the development of preneoplastic lesions in a rat hepatocarcinogenesis model. *Molecular carcinogenesis*. 2007;46(7):524-33.

Martin C, Wohlsen A, Uhlig S. Changes in airway resistance by simultaneous exposure to TNF-alpha and IL-1beta in perfused rat lungs. *American journal of physiology Lung cellular and molecular physiology*. 2001;280(4):L595-601.

Martin DM, Piscopo AN, Chintala MM, Gleason TR, Berry W. Developing qualitative ecosystem service relationships with the Driver Pressure-State-Impact-Response framework: A case study on Cape Cod, Massachusetts. *Ecological Indicators*. 2018;84:404-15.

Martin-de-Lucia I, Campos-Manas MC, Aguera A, Leganes F, Fernandez-Pinas F, Rosal R. Combined toxicity of graphene oxide and wastewater to the green alga *Chlamydomonas reinhardtii*. *Environmental Science-Nano*. 2018;5(7):1729-44.

Martinez-Garcia LB, Korthals G, Brussaard L, Jorgensen HB, De Deyn GB. Organic management and cover crop species steer soil microbial community structure and functionality along with soil organic matter properties. *Agriculture Ecosystems & Environment*. 2018;263:7-17.

Martins M, Silva A, Costa MH, Miguel C, Costa PM. Co-exposure to environmental carcinogens in vivo induces neoplasia-related hallmarks in low-genotoxicity events, even after removal of insult. *Scientific reports*. 2018;8(1):3649.

Martins M, Silva A, Costa MH, Miguel C, Costa PM. Co-exposure to environmental carcinogens in vivo induces neoplasia-related hallmarks in low-genotoxicity events, even after removal of insult. *Scientific Reports*. 2018;8.

Martins MJ, Bravo R, Carmo H, Carvalho F, Bastos MDL, Dinis-Oliveira RJ, et al. Co-exposure to cocaine and ethanol induces oxidative impairment in H9c2 cardiomyocytes. *Toxicology Letters*. 2018;295:S269-S70.

Martins MJ, Bravo RR, Enea M, Carmo H, Carvalho F, Bastos MD, et al. Ethanol addictively enhances the in vitro cardiotoxicity of cocaine through oxidative damage, energetic deregulation, and apoptosis. *Archives of Toxicology*. 2018;92(7):2311-25.

Maruoka Y, Nagaya T, Sato K, Ogata F, Okuyama S, Choyke PL, et al. Near Infrared Photoimmunotherapy with Combined Exposure of External and Interstitial Light Sources. *Molecular pharmaceuticals*. 2018.

Maruoka Y, Nagaya T, Sato K, Ogata F, Okuyama S, Choyke PL, et al. Near Infrared Photoimmunotherapy with Combined Exposure of External and Interstitial Light Sources. *Molecular Pharmaceuticals*. 2018;15(9):3634-41.

Marzan Y, Mora R, Butler A, Butler M, Ingenito EP. Effects of simultaneous exposure of surfactant to serum proteins and free radicals. *Experimental lung research*. 2002;28(2):99-121.

Mason AM, Borgert CJ, Bus JS, Moiz Mumtaz M, Simmons JE, Sipes IG, et al. Improving the scientific foundation for mixtures joint toxicity and risk assessment: contributions from the SOT mixtures project--introduction. *Toxicology and applied pharmacology*. 2007;223(2):99-103.

Mateus ML, Santos AP, Batoreu MC. Evidence for zinc protection against 2,5-hexanedione toxicity by co-exposure of rats to zinc chloride. *Journal of applied toxicology : JAT*. 2000;20(3):211-4.

Matiushichev VB, Taratukhin VR, Sharatova VG. Skin enzymatic activity in rats on combined exposure of the body to external beta irradiation and heat load. *Radiobiologiya*. 1978;18(1):96-9.

Matiushiev VB, Taratukhin VR, Iuzhakova GA. Biochemical effects of partial irradiation of the body during combined exposure to radiation. *Radiobiologiya*. 1976;16(2):239-42.

Matrisch J, Altmeyer S. Mechano-optical modulator based on a rotating optical flat applied to simultaneous holographic multiplexing of gratings. *Applied Optics*. 2018;57(2):334-9.

Matsumoto AK, Higashi CM, Bonifacio KL, Barbosa MA, Klein RM, Filgueiras GB, et al. Co-exposure to fish oil or folic acid does not reverse effects in the progeny induced by maternal exposure to fluoxetine. *Neurotoxicology and teratology*. 2016;56:1-8.

Matta SG, Elberger AJ. Combined exposure to nicotine and ethanol throughout full gestation results in enhanced acquisition of nicotine self-administration in young adult rat offspring. *Psychopharmacology*. 2007;193(2):199-213.

Mattsson MO, Zeni O, Simko M, Scarfi MR. Editorial: Effects of Combined EMF Exposures and Co-exposures. *Frontiers in Public Health*. 2018;6.

Matzke S, Elsey-Quirk T. *Spartina patens* Productivity and Soil Organic Matter Response to Sedimentation and Nutrient Enrichment. *Wetlands*. 2018;38(6):1233-44.

Maulvault AL, Barbosa V, Alves R, Anacleto P, Camacho C, Cunha S, et al. Integrated multi-biomarker responses of juvenile seabass to diclofenac, warming and acidification co-exposure. *Aquatic Toxicology*. 2018;202:65-79.

Maya N, Crispo C, McFarland V, Nasuhoglu D, Isazadeh S, Yargeau V, et al. Toxicity of Extracts From Municipal Wastewater to Early Life Stages of Japanese Medaka (*Oryzias latipes*) to Evaluate Removals of Micropollutants by Wastewater Treatment. *Environmental Toxicology and Chemistry*. 2018;37(1):136-44.

Mayer P, Reichenberg F. Can highly hydrophobic organic substances cause aquatic baseline toxicity and can they contribute to mixture toxicity? *Environmental toxicology and chemistry*. 2006;25(10):2639-44.

Mayoly A, Mattei JC, Moullot P, Jaloux C, Rochwerger A, Casanova D, et al. Gastrocnemius Myocutaneous Flaps for Knee Joint Coverage. *Annals of Plastic Surgery*. 2018;81(2):208-14.

Mazurenko NP, Merekalova ZI, Pavlish OA, Bykovsky AF, Kurzman MJ, Mazurenko NN. In vitro studies of a co-carcinogenic effect of vaccinia and herpes group viruses. *Neoplasma*. 1981;28(4):403-12.

McDonough CA, Franks DG, Hahn ME, Lohmann R. Aryl hydrocarbon receptor-mediated activity of gas-phase ambient air derived from passive sampling and an in vitro bioassay. *Environmental Toxicology and Chemistry*. 2019;38(4):748-59.

McMichael RE, Grinder RE. Children's guilt after transgression: combined effect of exposure to American culture and ethnic background. *Child development*. 1966;37(2):425-31.

McMullin TS, Bamber AM, Bon D, Vigil DI, Van Dyke M. Exposures and Health Risks from Volatile Organic Compounds in Communities Located near Oil and Gas Exploration and Production Activities in Colorado (USA). *International Journal of Environmental Research and Public Health*. 2018;15(7).

McNeil SI, Bhatnagar MK, Turner CJ. Combined toxicity of ethanol and methylmercury in rat. *Toxicology*. 1988;53(2-3):345-63.

Mecozzi M. Comment on the paper "Individual and combined toxic effect of nickel and chromium on biochemical constituents in *E. coli* using FTIR spectroscopy and principal component analysis" by Annika Durva Gupta and Karthikeyan Sivakumaran. *Ecotoxicology and environmental safety*. 2018;147:610-1.

Mecozzi M. Comment on the paper "Individual and combined toxic effect of nickel and chromium on biochemical constituents in *E-coli* using FTIR spectroscopy and principal component analysis" by Annika Durva Gupta and Karthikeyan Sivakumaran. *Ecotoxicology and Environmental Safety*. 2018;147:610-1.

Medvedev AI, Akatov VS, Evtodienko IV, Leshchenko VV, Solov'eva ME, Lezhnev EI, et al. DNA degradation and repair in human laryngeal carcinoma

HEp-2 cells after combined exposure to vitamin B12b and ascorbic acid. *Tsitologiya*. 2001;43(3):274-8.

Meek MEB, Boobis AR, Crofton KM, Heinemeyer G, Raaij MV, Vickers C. Risk assessment of combined exposure to multiple chemicals: A WHO/IPCS framework. *Regulatory toxicology and pharmacology* : RTP. 2011.

Meek MEB. International experience in addressing combined exposures: increasing the efficiency of assessment. *Toxicology*. 2013;313(2-3):185-9.

Meenan J. Co-carcinogenic effect of sulphasalazine. *British journal of cancer*. 1993;68(5):1043-4.

Mehler WT, Du J, Lydy MJ, You J. Joint toxicity of a pyrethroid insecticide, cypermethrin, and a heavy metal, lead, to the benthic invertebrate *Chironomus dilutus*. *Environmental toxicology and chemistry*. 2011;30(12):2838-45.

Meister A, Bening Y, Brumm LM. The NSI (Noise Sensitivity Index)--a method for the demonstration of acute physical symptoms in noise exposure and combination exposure. *Zeitschrift fur die gesamte Hygiene und ihre Grenzgebiete*. 1989;35(8):502-5.

Meizerov ES. Combined effect of acceleration and double exposure to radiation in 50 and 100 r doses on conditioned reflexes in rats and transfer of experience in a maze. *Radiobiologiya*. 1976;16(5):744-9.

Mejia JJ, Diaz-Barriga F, Calderon J, Rios C, Jimenez-Capdeville ME. Effects of lead-arsenic combined exposure on central monoaminergic systems. *Neurotoxicology and teratology*. 1997;19(6):489-97.

Melito M, Metzger JP, de Oliveira AA. Landscape-level effects on aboveground biomass of tropical forests: A conceptual framework. *Global Change Biology*. 2018;24(2):597-607.

Melvin SD, Cameron MC, Lanctot CM. Individual and mixture toxicity of pharmaceuticals naproxen, carbamazepine, and sulfamethoxazole to Australian striped marsh frog tadpoles (*Limnodynastes peronii*). *Journal of toxicology and environmental health Part A*. 2014;77(6):337-45.

Meneely JP, Hajslova J, Krska R, Elliott CT. Assessing the combined toxicity of the natural toxins, aflatoxin B-1, fumonisin B-1 and microcystin-LR by high content analysis. *Food and Chemical Toxicology*. 2018;121:527-40.

Menezes JA, Carvalho CF, Rodrigues JLG, Araujo CFS, dos Santos NR, Lima CS, et al. Environmental Co-Exposure to Lead and Manganese and

Intellectual Deficit in School-Aged Children. *International Journal of Environmental Research and Public Health*. 2018;15(11).

Meng Y, Wang S, Wang Z, Ye N, Fang H. Algal toxicity of binary mixtures of zinc oxide nanoparticles and tetrabromobisphenol A: Roles of dissolved organic matters. *Environmental Toxicology and Pharmacology*. 2018;64:78-85.

Meng ZJ, Dang XH, Gao Y, Ren XM, Ding YL, Wang M. Interactive effects of wind speed, vegetation coverage and soil moisture in controlling wind erosion in a temperate desert steppe, Inner Mongolia of China. *Journal of Arid Land*. 2018;10(4):534-47.

Men'shov AA, Shleifman FM, Tashker ID, Cherniuk VI, Baril AL. Characteristics of the combined effect of exposure to industrial noise, vibration and microclimate on the human body. *Vrachebnoe delo*. 1980(10):109-12.

Merino-Garcia D, Kusk KO, Christensen ER. Joint toxicity of similarly and dissimilarly acting chemicals to *Daphnia magna* at different response levels. *Archives of environmental contamination and toxicology*. 2003;45(3):289-96.

Mesa-Gresa P, Ramos-Campos M, Redolat R. Corticosterone levels and behavioral changes induced by simultaneous exposure to chronic social stress and enriched environments in NMRI male mice. *Physiology & behavior*. 2016;158:6-17.

Meshkov NA. The biological effects of combined exposure to radiation and chemical factors (experimental research). *Voenno-meditsinskii zhurnal*. 1995(11):47-51.

Meurman LO, Kiviluoto R, Hakama M. Combined effect of asbestos exposure and tobacco smoking on Finnish anthophyllite miners and millers. *Annals of the New York Academy of Sciences*. 1979;330:491-5.

Meyer LA, Johnson MG, Cullen DM, Vivanco JF, Blank RD, Ploeg H-L, et al. Combined exposure to big endothelin-1 and mechanical loading in bovine sternal cores promotes osteogenesis. *Bone*. 2016;85:115-22.

Micallef MJ, Tanimoto T, Torigoe K, Nishida Y, Kohno K, Ikegami H, et al. Simultaneous exposure to interleukin-18 and interleukin-10 in vitro synergistically augments murine spleen natural killer cell activity. *Cancer immunology, immunotherapy : CII*. 1999;48(2-3):109-17.

Miceli M, Molina SJ, Forcada A, Acosta GB, Guelman LR. Voluntary alcohol intake after noise exposure in adolescent rats: Hippocampal-related behavioral alterations. *Brain Research*. 2018;1679:10-8.

Michurina SV, Borodin II, Trufakin VA, Belkin AD, Vakulin GM, Larionov PM, et al. Micro- and ultrastructural characteristics of liver and nuclear endonuclease activity in hepatocytes after the combined exposure to industrial frequency magnetic field and continuous illumination. *Morfologiya* (Saint Petersburg, Russia). 2010;137(5):47-51.

Migliaccio V, Lionetti L, Putti R, Sica R, Scudiero R. Combined effects of DDE and hyperlipidic diet on metallothionein expression and synthesis in rat tissues. *Environmental Toxicology*. 2019;34(3):283-93.

Migliaccio V, Scudiero R, Sica R, Lionetti L, Putti R. Oxidative stress and mitochondrial uncoupling protein 2 expression in hepatic steatosis induced by exposure to xenobiotic DDE and high fat diet in male Wistar rats. *Plos One*. 2019;14(4).

Mihaljevic JR, Hoverman JT, Johnson PTJ. Co-exposure to multiple ranavirus types enhances viral infectivity and replication in a larval amphibian system. *Diseases of Aquatic Organisms*. 2018;132(1):23-35.

Mikhailovskaya AA, Kaplan MA, Brodskij RA, Bandurko LN. Combined exposure to electrochemical lysis and photodynamic therapy. *Bulletin of experimental biology and medicine*. 2009;147(1):88-90.

Mikolajczyk A, Gajewicz A, Mulkiewicz E, Rasulev B, Marchelek M, Diak M, et al. Nano-QSAR modeling for ecosafe design of heterogeneous TiO₂-based nano-photocatalysts. *Environmental Science-Nano*. 2018;5(5):1150-60.

Mikov I, Stankov K, Vasovic V, Mikov A, Golocorbin-Kon S, Mikov M. Effect of simultaneous exposure to benzene and ethanol on urinary thioether excretion. *International journal of occupational safety and ergonomics : JOSE*. 2012;18(1):107-11.

Milligan G, Booth KE, Cox ES, Pakeman RJ, Le Duc MG, Connor L, et al. Change to ecosystem properties through changing the dominant species: Impact of *Pteridium aquilinum*-control and heathland restoration treatments on selected soil properties. *Journal of Environmental Management*. 2018;207:1-9.

Miner NB, O'Callaghan JP, Phillips TJ, Janowsky A. The combined effects of 3,4-methylenedioxymethamphetamine (MDMA) and selected substituted methcathinones on measures of neurotoxicity. *Neurotoxicology and teratology*. 2017;61:74-81.

Minguez L, Bureau R, Halm-Lemeille MP. Joint effects of nine antidepressants on *Raphidocelis subcapitata* and *Skeletonema marinoi*: A matter of amine functional groups. *Aquatic Toxicology*. 2018;196:117-23.

Minigalieva I, Bushueva T, Frohlich E, Meindl C, Ohlinger K, Panov V, et al. Are invivo and invitro assessments of comparative and combined toxicity of the same metallic nanoparticles compatible, or contradictory, or both? A juxtaposition of data obtained in respective experiments with NiO and Mn₃O₄ nanoparticles. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2017;109(Pt 1):393-404.

Minigalieva IA, Katsnelson BA, Privalova LI, Sutunkova MP, Gurvich VB, Shur VY, et al. Combined Subchronic Toxicity of Aluminum (III), Titanium (IV) and Silicon (IV) Oxide Nanoparticles and Its Alleviation with a Complex of Bioprotectors. *International Journal of Molecular Sciences*. 2018;19(3).

Minlikeeva AN, Cannioto R, Jensen A, Kjaer SK, Jordan SJ, Diergaard B, et al. Joint exposure to smoking, excessive weight, and physical inactivity and survival of ovarian cancer patients, evidence from the Ovarian Cancer Association Consortium. *Cancer Causes & Control*. 2019;30(5):537-47.

Miranda RR, Gorshkov V, Korzeniowska B, Kempf SJ, Neto FF, Kjeldsen F. Co-exposure to silver nanoparticles and cadmium induce metabolic adaptation in HepG2 cells. *Nanotoxicology*. 2018;12(7):781-95.

Mishra K, Sinha R, Jain V, Nepal S, Uddin K. Towards the assessment of sediment connectivity in a large Himalayan river basin. *Science of the Total Environment*. 2019;661:251-65.

Mitchell C, Hamed HA, Cruickshanks N, Tang Y, Bareford MD, Hubbard N, et al. Simultaneous exposure of transformed cells to SRC family inhibitors and CHK1 inhibitors causes cell death. *Cancer biology & therapy*. 2011;12(3):215-28.

Mitchell NJ, Xue KS, Lin S, Marroquin-Cardona A, Brown KA, Elmore SE, et al. Calcium montmorillonite clay reduces AFB1 and FB1 biomarkers in rats exposed to single and co-exposures of aflatoxin and fumonisin. *Journal of applied toxicology : JAT*. 2014;34(7):795-804.

Mittal M, Chatterjee S, Flora SJS. Combination therapy with vitamin C and DMSA for arsenic-fluoride co-exposure in rats. *Metallomics*. 2018;10(9):1291-306.

Mittal M, Flora SJS. Effects of individual and combined exposure to sodium arsenite and sodium fluoride on tissue oxidative stress, arsenic and fluoride levels in male mice. *Chemico-biological interactions*. 2006;162(2):128-39.

Miyakoshi J, Mori Y, Yaguchi H, Ding G, Fujimori A. Suppression of heat-induced HSP-70 by simultaneous exposure to 50 mT magnetic field. *Life sciences*. 2000;66(13):1187-96.

Miyamoto Y, Nakano T, Yamada K, Hatakeyama K, Hamaguchi M. Combined Effects of Drift Macroalgal Bloom and Warming on Occurrence and Intensity of Diel-Cycling Hypoxia in a Eutrophic Coastal Lagoon. *Estuaries and Coasts*. 2019;42(2):494-503.

Mizoue T, Miyamoto T, Shimizu T. Combined effect of smoking and occupational exposure to noise on hearing loss in steel factory workers. *Occupational and environmental medicine*. 2003;60(1):56-9.

Mo L-Y, Liu S-S, Zhu Y-N, Liu H-L, Liu H-Y, Yi Z-S. Combined toxicity of the mixtures of phenol and aniline derivatives to *Vibrio qinghaiensis* sp.-Q67. *Bulletin of environmental contamination and toxicology*. 2011;87(4):473-9.

Mochida K, Ito K, Harino H, Kakuno A, Fujii K. Acute toxicity of pyrrithione antifouling biocides and joint toxicity with copper to red sea bream (*Pagrus major*) and toy shrimp (*Heptacarpus futilirostris*). *Environmental toxicology and chemistry*. 2006;25(11):3058-64.

Mochizuki T, Amagai T, Tani A. Effects of soil water content and elevated CO₂ concentration on the monoterpene emission rate of *Cryptomeria japonica*. *Science of the Total Environment*. 2018;634:900-8.

Mohammadi S, Labbafinejad Y, Attarchi M. Combined effects of ototoxic solvents and noise on hearing in automobile plant workers in Iran. *Arhiv za higijenu rada i toksikologiju*. 2010;61(3):267-74.

Mohammadi S, Mazhari MM, Mehrparvar AH, Attarchi MS. Effect of simultaneous exposure to occupational noise and cigarette smoke on binaural hearing impairment. *Noise & health*. 2010;12(48):187-90.

Mohmood I, Ahmad I, Asim M, Costa L, Lopes CB, Trindade T, et al. Interference of the co-exposure of mercury with silica-coated iron oxide nanoparticles can modulate genotoxicity induced by their individual exposures--a paradox depicted in fish under in vitro conditions. *Environmental science and pollution research international*. 2015;22(5):3687-96.

Moldaver DM, Bharhani MS, Rudulier CD, Wattie J, Inman MD, Larche M. Induction of bystander tolerance and immune deviation after Fel d 1 peptide immunotherapy. *Journal of Allergy and Clinical Immunology*. 2019;143(3):1087-+.

Molina AJ, Llorens P, Garcia-Estringana P, de las Heras MM, Cayuela C, Gallart F, et al. Contributions of throughfall, forest and soil characteristics to near-surface soil water-content variability at the plot scale in a mountainous Mediterranean area. *Science of the Total Environment*. 2019;647:1421-32.

Molina-Navarro E, Andersen HE, Nielsen A, Thodsen H, Trolle D. Quantifying the combined effects of land use and climate changes on stream flow and nutrient loads: A modelling approach in the Odense Fjord catchment (Denmark). *Science of the Total Environment*. 2018;621:253-64.

Moore BF, Starling AP, Magzamen S, Harrod CS, Allshouse WB, Adgate JL, et al. Fetal exposure to maternal active and secondhand smoking with offspring early-life growth in the Healthy Start study. *International Journal of Obesity*. 2019;43(4):652-62.

Moore MN, Wedderburn RJ, Clarke KR, McFadzen IRB, Lowe DM, Readman JW. Emergent synergistic lysosomal toxicity of chemical mixtures in molluscan blood cells (hemocytes). *Environmental Pollution*. 2018;235:1006-14.

Morales M, Iraola V, Leonor JR, Bartra J, Rodriguez F, Boquete M, et al. Different sensitization to storage mites depending on the co-exposure to house dust mites. *Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology*. 2015;114(1):36-42.e1.

Morata TC, Engel T, Durao A, Costa TR, Krieg EF, Dunn DE, et al. Hearing loss from combined exposures among petroleum refinery workers. *Scandinavian audiology*. 1997;26(3):141-9.

Morata TC, Nylen P, Johnson AC, Dunn DE. Auditory and vestibular functions after single or combined exposure to toluene: a review. *Archives of toxicology*. 1995;69(7):431-43.

Morata TC. Study of the effects of simultaneous exposure to noise and carbon disulfide on workers' hearing. *Scandinavian audiology*. 1989;18(1):53-8.

Morcos PN, Cleary Y, Sturm-Pellanda C, Guerini E, Abt M, Donzelli M, et al. Effect of Hepatic Impairment on the Pharmacokinetics of Alectinib. *Journal of Clinical Pharmacology*. 2018;58(12):1618-28.

Morcos PN, Nueesch E, Jaminion F, Guerini E, Hsu JC, Bordogna W, et al. Exposure-response analysis of alectinib in crizotinib-resistant ALK-positive non-small cell lung cancer. *Cancer Chemotherapy and Pharmacology*. 2018;82(1):129-38.

More SJ, Hardy A, Bampidis V, Benford D, Bennekou SH, Bragard C, et al. Guidance on harmonised methodologies for human health, animal health and ecological risk assessment of combined exposure to multiple chemicals. *Efsa Journal*. 2019;17(3).

Moreira A, Figueira E, Mestre NC, Schrama D, Soares A, Freitas R, et al. Impacts of the combined exposure to seawater acidification and arsenic on the proteome of *Crassostrea angulata* and *Crassostrea gigas*. *Aquatic Toxicology*. 2018;203:117-29.

Moreira A, Freitas R, Figueira E, Ghirardini AV, Soares A, Radaelli M, et al. Combined effects of arsenic, salinity and temperature on *Crassostrea gigas* embryotoxicity. *Ecotoxicology and Environmental Safety*. 2018;147:251-9.

Morel G, Lambert AM, Rieger B, Subra I. Interactive effect of combined exposure to glycol ethers and alcohols on toxicodynamic and toxicokinetic parameters. *Archives of toxicology*. 1996;70(8):519-25.

Moretti M, Villarini M, Simonucci S, Fatigoni C, Scassellati-Sforzolini G, Monarca S, et al. Effects of co-exposure to extremely low frequency (ELF) magnetic fields and benzene or benzene metabolites determined in vitro by the alkaline comet assay. *Toxicology letters*. 2005;157(2):119-28.

Morgan JD, Mitchell DG, Chapman PM. Individual and combined toxicity of manganese and molybdenum to mussel, *Mytilus edulis*, larvae. *Bulletin of environmental contamination and toxicology*. 1986;37(2):303-7.

Morgan WF, Yates BL, Rufer JT, Abella Columna E, Valcarcel ER, Phillips JW. Chromosomal aberration induction in CHO cells by combined exposure to restriction enzymes and X-rays. *International journal of radiation biology*. 1991;60(4):627-34.

Mori N, Debeljak B, Skerjanec M, Simcic T, Kanduc T, Brancelj A. Modelling the effects of multiple stressors on respiration and microbial biomass in the hyporheic zone using decision trees. *Water Research*. 2019;149:9-20.

Mori T, Ito S, Namiki M, Suzuki T, Kobayashi S, Matsubayashi K, et al. Involvement of free radicals followed by the activation of phospholipase A2 in the mechanism that underlies the combined effects of methamphetamine and morphine

on subacute toxicity or lethality in mice: comparison of the therapeutic potential of fullerene, mepacrine, and cooling. *Toxicology*. 2007;236(3):149-57.

Morimoto T, Higaki T, Ota M, Inawaka K, Kawamura S, Bungo T. Effect of simultaneous exposure to mixture of two skin sensitizers on skin sensitization response in guinea pigs and mice. *The Journal of toxicological sciences*. 2014;39(1):163-71.

Morozesk M, Franqui LS, Mansano AS, Martinez DST, Fernandes MN. Interactions of oxidized multiwalled carbon nanotube with cadmium on zebrafish cell line: The influence of two co-exposure protocols on in vitro toxicity tests. *Aquatic toxicology (Amsterdam, Netherlands)*. 2018;200:136-47.

Morozesk M, Franqui LS, Mansano AS, Martinez DST, Fernandes MN. Interactions of oxidized multiwalled carbon nanotube with cadmium on zebrafish cell line: The influence of two co-exposure protocols on in vitro toxicity tests. *Aquatic Toxicology*. 2018;200:136-47.

Morris-Schaffer K, Sobolewski M, Allen JL, Marvin E, Yee M, Arora M, et al. Effect of neonatal hyperoxia followed by concentrated ambient ultrafine particle exposure on cumulative learning in C57B1/6J mice. *Neurotoxicology*. 2018;67:234-44.

Moskalev II, Strel'tsova VN. Combined effect of radiation and chemical carcinogens. *Meditinskaiia radiologiiia*. 1984;29(9):50-9.

Motsnyj MP, Elina OV, Botsva NP, Kochubey SO. Effect of photostimulation on biopotentials of maize leaves in conditions of thermal irritation. *Regulatory Mechanisms in Biosystems*. 2018;9(3):347-52.

Moubarak AS, Johnson ZB, Rosenkrans CF. Antagonistic effects of simultaneous exposure of ergot alkaloids on kidney adenosine triphosphatase system. *In vitro cellular & developmental biology Animal*. 2003;39(8-9):395-8.

Moulder JE, Fish BL. Effect of sequencing on combined toxicity of renal irradiation and cisplatin. *NCI monographs : a publication of the National Cancer Institute*. 1988(6):35-9.

Mrak T, Straus I, Grebenc T, Gricar J, Hoshika Y, Carriero G, et al. Different belowground responses to elevated ozone and soil water deficit in three European oak species (*Quercus ilex*, *Q.-pubescens* and *Q.-robur*). *Science of the Total Environment*. 2019;651:1310-20.

Mrdjen I, Morse MA, Ruch RJ, Knobloch TJ, Choudhary S, Weghorst CM, et al. Impact of Microcystin-LR on Liver Function Varies by Dose and Sex in Mice. *Toxins*. 2018;10(11).

Mu J, Chernick M, Dong W, Di Giulio RT, Hinton DE. Early life co-exposures to a real-world PAH mixture and hypoxia result in later life and next generation consequences in medaka (*Oryzias latipes*). *Aquatic toxicology* (Amsterdam, Netherlands). 2017;190:162-73.

Mu WJ, Warren A, Pan XM, Ying C. Toxicity of Chlorpyrifos and Dimethoate to the Ciliate *Urostyla grandis*, with Notes on Their Effects on Cell Ultrastructure. *Journal of Ocean University of China*. 2018;17(3):697-704.

Mudaliar JH, Freischlag JA, Johnson D, Coe DA, Kelly H, Hanson L, et al. Combined exposure to cigarette smoke and hypercholesterolemia decreases vasorelaxation of the aorta. *Journal of vascular surgery*. 1997;25(5):884-9.

Mukhamedov T, Ziiaev SI. DISTURBANCES IN THE CAPILLARY PERMEABILITY OF THE SKIN IN COMBINED EXPOSURE TO I-131 AND NOISE. *Meditinskaiia radiologiia*. 1964;9:34-7.

Mukhametova GM, Vozovaia MA. Reproductive power and incidence of gynecological diseases among female workers exposed to a combined effect of gasoline and chlorinated hydrocarbons. *Gigiena truda i professional'nye zabolevaniia*. 1972;16(11):6-9.

Mukul SA, Alamgir M, Sohel MSI, Pert PL, Herbohn J, Turton SM, et al. Combined effects of climate change and sea-level rise project dramatic habitat loss of the globally endangered Bengal tiger in the Bangladesh Sundarbans. *Science of the Total Environment*. 2019;663:830-40.

Muller WU, Streffer C. Time factors in combined exposures of mouse embryos to radiation and mercury. *Radiation and environmental biophysics*. 1988;27(2):115-21.

Muller WU. Temperature dependence of combined exposure of preimplantation mouse embryos to X-rays and mercury. *Radiation and environmental biophysics*. 1990;29(2):109-14.

Munari M, Matozzo V, Gagne F, Chemello G, Riedl V, Finos L, et al. Does exposure to reduced pH and diclofenac induce oxidative stress in marine bivalves? A comparative study with the mussel *Mytilus galloprovincialis* and the clam *Ruditapes philippinarum*. *Environmental Pollution*. 2018;240:925-37.

Mundy ME, Honey RC, Dwyer DM. Superior discrimination between similar stimuli after simultaneous exposure. *Quarterly journal of experimental psychology* (2006). 2009;62(1):18-25.

Muniz JA, Gomez G, Gonzalez B, Rivero-Echeto MC, Cadet JL, Garcia-Rill E, et al. Combined Effects of Simultaneous Exposure to Caffeine and Cocaine in the Mouse Striatum. *Neurotoxicity research*. 2016;29(4):525-38.

Munoz-Abellan C, Rabasa C, Daviu N, Nadal R, Armario A. Behavioral and endocrine consequences of simultaneous exposure to two different stressors in rats: interaction or independence? *PloS one*. 2011;6(6):e21426.

Munoz-Rocha TV, Ortiz MTY, Romero M, Pantic I, Schnaas L, Bellinger D, et al. Prenatal co-exposure to manganese and depression and 24-months neurodevelopment. *Neurotoxicology*. 2018;64:134-41.

Munoz-Rocha TV, Tamayo Y Ortiz M, Romero M, Pantic I, Schnaas L, Bellinger D, et al. Prenatal co-exposure to manganese and depression and 24-months neurodevelopment. *Neurotoxicology*. 2018;64:134-41.

Munro TR. Proceedings: Are the combined effects of X-ray and immune responses on cells unexpectedly lethal? *The British journal of radiology*. 1975;48(569):414.

Muronets EM, Kovtunenkov LV, Kameneva SV. Mutagenic effect of combined exposure to 8-methoxypsoralen or angelicin and long-wave ultraviolet light in uvs-strains of *Aspergillus nidulans*. *Genetika*. 1980;16(7):1168-75.

Murphy D, Bellis K, Hutchinson D. Vapour, gas, dust and fume occupational exposures in male patients with rheumatoid arthritis resident in Cornwall (UK) and their association with rheumatoid factor and anti-cyclic protein antibodies: a retrospective clinical study. *Bmj Open*. 2018;8(5).

Murphy ST, Monahan JL, Zajonc RB. Additivity of nonconscious affect: combined effects of priming and exposure. *Journal of personality and social psychology*. 1995;69(4):589-602.

Murray A, Ormeci B. Competitive effects of humic acid and wastewater on adsorption of Methylene Blue dye by activated carbon and non-imprinted polymers. *Journal of Environmental Sciences*. 2018;66:310-7.

Murthy MS, Madhvanath U, Subrahmanyam P, Rao BS, Reddy NM. Letter: Synergistic effect of simultaneous exposure to 60-Co gamma rays and 210-Po alpha rays in diploid yeast. *Radiation research*. 1975;63(1):185-90.

Murty LD, Duringer JM, Craig AM. Co-exposure of the Mycotoxins Lolitrem B and Ergovaline in Steers Fed Perennial Ryegrass (*Lolium perenne*) Straw: Metabolic Characterization of Excreta. *Journal of Agricultural and Food Chemistry*. 2018;66(25):6394-401.

Murzenok PP, Chura NA. Effects of diazepam and piracetam on the rat behavior responses after combined exposure to the low doses of ionizing radiation and heat. *Rossiiskii fiziologicheskii zhurnal imeni IM Sechenova*. 1998;84(3):218-25.

Muturi EJ, Ramirez JL, Doll KM, Bowman MJ. Combined Toxicity of Three Essential Oils Against *Aedes aegypti* (Diptera: Culicidae) Larvae. *Journal of medical entomology*. 2017;54(6):1684-91.

Mwampamba TH, van Schaik N, Hernandez LAC. Incorporating Ecohydrological Processes Into an Analysis of Charcoal-Livestock Production Systems in the Tropics: An Alternative Interpretation of the Water-Energy-Food Nexus. *Frontiers in Environmental Science*. 2018;6.

Mwense M, Wang XZ, Buontempo FV, Horan N, Young A, Osborn D. Prediction of noninteractive mixture toxicity of organic compounds based on a fuzzy set method. *Journal of chemical information and computer sciences*. 2004;44(5):1763-73.

Mwense M, Wang XZ, Buontempo FV, Horan N, Young A, Osborn D. QSAR approach for mixture toxicity prediction using independent latent descriptors and fuzzy membership functions. *SAR and QSAR in environmental research*. 2006;17(1):53-73.

Naasz S, Altenburger R, Kuhnel D. Environmental mixtures of nanomaterials and chemicals: The Trojan-horse phenomenon and its relevance for ecotoxicity. *Science of the Total Environment*. 2018;635:1170-81.

Nabi H, Kivimaki M, Empana J-P, Sabia S, Britton A, Marmot MG, et al. Combined effects of depressive symptoms and resting heart rate on mortality: the Whitehall II prospective cohort study. *The Journal of clinical psychiatry*. 2011;72(9):1199-206.

Nacca N, Schult R, Loflin R, Weltler A, Gorodetsky R, Kacinko S, et al. COMA, SEIZURES, ATRIOVENTRICULAR BLOCK, AND HYPOGLYCEMIA IN AN ADB-FUBINACA BODY-PACKER. *Journal of Emergency Medicine*. 2018;55(6):788-91.

Nagai T, De Schamphelaere KAC. The effect of binary mixtures of zinc, copper, cadmium, and nickel on the growth of the freshwater diatom *Navicula pelliculosa* and comparison with mixture toxicity model predictions. *Environmental toxicology and chemistry*. 2016;35(11):2765-73.

Nagai T. Predicting herbicide mixture effects on multiple algal species using mixture toxicity models. *Environmental toxicology and chemistry*. 2017;36(10):2624-30.

Nakhoda F, Sartorius B, Govender SM. The effects of combined exposure of solvents and noise on auditory function - A systematic review and meta-analysis. *South African Journal of Communication Disorders*. 2019;66(1).

Nam T-H, Kim L, Jeon H-J, Kim K, Ok Y-S, Choi S-D, et al. Biomarkers indicate mixture toxicities of fluorene and phenanthrene with endosulfan toward earthworm (*Eisenia fetida*). *Environmental geochemistry and health*. 2017;39(2):307-17.

Namiki M, Mori T, Sawaguchi T, Ito S, Suzuki T. Underlying mechanism of combined effect of methamphetamine and morphine on lethality in mice and therapeutic potential of cooling. *Journal of pharmacological sciences*. 2005;99(2):168-76.

Nampoothiri LP, Agarwal A, Gupta S. Effect of co-exposure to lead and cadmium on antioxidant status in rat ovarian granulosa cells. *Archives of toxicology*. 2007;81(3):145-50.

Narisetty NN, Mukherjee B, Chen YH, Gonzalez R, Meeker JD. Selection of nonlinear interactions by a forward stepwise algorithm: Application to identifying environmental chemical mixtures affecting health outcomes. *Statistics in Medicine*. 2019;38(9):1582-600.

Nascimento FJA, Svendsen C, Bradshaw C. Combined Effects from gamma Radiation and Fluoranthene Exposure on Carbon Transfer from Phytoplankton to Zooplankton. *Environmental science & technology*. 2015;49(17):10624-31.

Nascimento FJA, Svendsen C, Bradshaw C. Joint Toxicity of Cadmium and Ionizing Radiation on Zooplankton Carbon Incorporation, Growth and Mobility. *Environmental science & technology*. 2016;50(3):1527-35.

Nasonova EA, Glazunov AV. Recovery of the viability of Chinese hamster V79-4 cells after combined exposure to hyperthermia and radiation. *Tsitologiya*. 1988;30(10):1273-6.

Naumann G, Vargas WM, Barbosa P, Blauhut V, Spinoni J, Vogt JV. Dynamics of Socioeconomic Exposure, Vulnerability and Impacts of Recent Droughts in Argentina. *Geosciences*. 2019;9(1).

Ndjaboue R, Brisson C, Talbot D, Vezina M. Combined exposure to adverse psychosocial work factors and medically certified absence for mental health problems: A 5-year prospective study. *Journal of psychosomatic research*. 2017;92:9-15.

Neale PA, Leusch FDL, Escher BI. Applying mixture toxicity modelling to predict bacterial bioluminescence inhibition by non-specifically acting pharmaceuticals and specifically acting antibiotics. *Chemosphere*. 2017;173:387-94.

Nechkina MA. Cytogenetic activity of 2,4-D dimethylamine salt and ammonium nitrate in isolated and combined exposure of plants in experiment. *Gigiena i sanitariia*. 1993(6):55-7.

Nekhoroshev AS. Characteristics of the reactions of the nuclei of the spinal organ hair cells in response to combined exposure to general vibration and noise. *Gigiena i sanitariia*. 1991(1):47-9.

Nemirovskaia TL, Tarasova OS, Shenkman BS, Koshelev VB. The effect of the 12-day combined exposure to hypobaric hypoxia and physical load on the structuro-metabolic characteristics of rat skeletal muscles. *Biulleten' eksperimental'noi biologii i meditsiny*. 1995;119(6):602-5.

Nenashev AA, Chausov VI, Pacheva MT, Otarova DD. Changes in the nervous system from combined exposure to vibration and hyperbaric oxygenation. *Nervnaia sistema*. 1988;27:87-92.

Neovius M, Sundstrom J, Rasmussen F. Combined effects of overweight and smoking in late adolescence on subsequent mortality: nationwide cohort study. *BMJ (Clinical research ed)*. 2009;338:b496.

Neukomm S, de T. Study of some optical azo dyes from the point of view of their carcinogenic and co-carcinogenic activity. *Medicina experimentalis : International journal of experimental medicine*. 1961;4:296-306.

Neukomm S. Co-carcinogenic action of various fractions of tobacco smoke. *Acta - Unio Internationalis Contra Cancrum*. 1962;18:33-6.

Neukomm S. Evaluation of the potential carcinogenic and co-carcinogenic action of drugs (injectable organic iron complexes). *Oncologia*. 1965;19(3):239-53.

Neuwoehner J, Zilberman T, Fenner K, Escher BI. QSAR-analysis and mixture toxicity as diagnostic tools: Influence of degradation on the toxicity and mode of action of diuron in algae and daphnids. *Aquatic toxicology* (Amsterdam, Netherlands). 2010;97(1):58-67.

Ng CYP, Choi VWY, Lam ACL, Cheng SH, Yu KN. The multiple stressor effect in zebrafish embryos from simultaneous exposure to ionising radiation and cadmium. *Journal of radiological protection : official journal of the Society for Radiological Protection*. 2013;33(1):113-21.

Nguyen DTT, Praveen P, Loh KC. *Zymomonas mobilis* immobilization in polymeric membranes for improved resistance to lignocellulose-derived inhibitors in bioethanol fermentation. *Biochemical Engineering Journal*. 2018;140:29-37.

Nguyen LTH, Muysen BTA, Janssen CR. Single versus combined exposure of *Hyalella azteca* to zinc contaminated sediment and food. *Chemosphere*. 2012;87(1):84-90.

Nguyen TTN, Wallace HM, Xu CY, Zwieten L, Weng ZH, Xu ZH, et al. The effects of short term, long term and reapplication of biochar on soil bacteria. *Science of the Total Environment*. 2018;636:142-51.

Ni K, Kage H, Pacholski A. Effects of novel nitrification and urease inhibitors (DCD/TZ and 2-NPT) on N₂O emissions from surface applied urea: An incubation study. *Atmospheric Environment*. 2018;175:75-82.

Ni W, Huang Y, Wang X, Zhang J, Wu K. Associations of neonatal lead, cadmium, chromium and nickel co-exposure with DNA oxidative damage in an electronic waste recycling town. *The Science of the total environment*. 2014;472:354-62.

Niehus NC, Floeter C, Hollert H, Witt G. Miniaturised Marine Algae Test with Polycyclic Aromatic Hydrocarbons - Comparing Equilibrium Passive Dosing and Nominal Spiking. *Aquatic Toxicology*. 2018;198:190-7.

Nigro M, Bernardeschi M, Costagliola D, Della Torre C, Frenzilli G, Guidi P, et al. n-TiO₂ and CdCl₂ co-exposure to titanium dioxide nanoparticles and cadmium: Genomic, DNA and chromosomal damage evaluation in the marine fish European sea bass (*Dicentrarchus labrax*). *Aquatic toxicology* (Amsterdam, Netherlands). 2015;168:72-7.

Nikishkin IA, Sukolinskii VN, Kovaleva OV, Raspopova NI, Naumenko VK. Enzymes protecting the erythrocyte membrane during the combined exposure

to an antioxidant complex and acute irradiation. *Radiobiologia*. 1992;32(5):738-42.

Nishino R, Fukuyama T, Kosaka T, Hayashi K, Watanabe Y, Kurosawa Y, et al. Effects of short-term oral combined exposure to environmental immunotoxic chemicals in mice. *Journal of immunotoxicology*. 2014;11(4):359-66.

Nizhegorodov VM, Kalinin IT, Voronin AP, Tsar NG, Markhotskii IL. The effect of prolonged, combined exposure to carbon monoxide, nitric oxide and ammonia on the supply and demand of the human organism in relation to vitamins A, B1, B2, B6, PP and C. *Gigiena truda i professional'nye zabolevaniia*. 1969;13(7):43-5.

Nkoom M, Lu GH, Liu JC. Occurrence and ecological risk assessment of pharmaceuticals and personal care products in Taihu Lake, China: a review. *Environmental Science-Processes & Impacts*. 2018;20(12):1640-8.

Nogueira E. Rat renal carcinogenesis after chronic simultaneous exposure to lead acetate and N-nitrosodiethylamine. *Virchows Archiv B, Cell pathology including molecular pathology*. 1987;53(6):365-74.

Nopp A, Johansson SGO, Lundberg M, Oman H. Simultaneous exposure of several allergens has an additive effect on multisensitized basophils. *Allergy*. 2006;61(11):1366-8.

Norgaard T, Paradelo M, Moldrup P, Katuwal S, de Jonge LW. Particle Leaching Rates from a Loamy Soil Are Controlled by the Mineral Fines Content and the Degree of Preferential Flow. *Journal of Environmental Quality*. 2018;47(6):1538-45.

Normandeau J, Chakrabarti S, Brodeur J. Influence of simultaneous exposure to acrylonitrile and styrene on the toxicity and metabolism of styrene in rats. *Toxicology and applied pharmacology*. 1984;75(2):346-9.

Nourshargh S, Hoult JR. Divergent effects of co-carcinogenic phorbol esters and a synthetic diacylglycerol on human neutrophil chemokinesis and granular enzyme secretion. *British journal of pharmacology*. 1987;91(3):557-68.

Nunes T, Cardoso P, Freitas R, Figueira E. Protective effects of farnesol on a *Rhizobium* strain exposed to cadmium. *Ecotoxicology and Environmental Safety*. 2018;165:622-9.

Nuttall JR, Kucera HR, Supasai S, Gaikwad NW, Oteiza PI. Combined Effects of Gestational Phthalate Exposure and Zinc Deficiency on Steroid

Metabolism and Growth. Toxicological sciences : an official journal of the Society of Toxicology. 2017;156(2):469-79.

Nuy JK, Lange A, Beermann AJ, Jensen M, Elbrecht V, Rohl O, et al. Responses of stream microbes to multiple anthropogenic stressors in a mesocosm study. Science of the Total Environment. 2018;633:1287-301.

Nylen P, Ebendal T, Eriksdotter-Nilsson M, Hansson T, Henschen A, Johnson AC, et al. Testicular atrophy and loss of nerve growth factor-immunoreactive germ cell line in rats exposed to n-hexane and a protective effect of simultaneous exposure to toluene or xylene. Archives of toxicology. 1989;63(4):296-307.

Nylen P, Hagman M, Johnson AC. Function of the auditory and visual systems, and of peripheral nerve, in rats after long-term combined exposure to n-hexane and methylated benzene derivatives. I. Toluene. Pharmacology & toxicology. 1994;74(2):116-23.

Nylen P, Hagman M, Johnson AC. Function of the auditory system, the visual system, and peripheral nerve and long-term combined exposure to toluene and ethanol in rats. Pharmacology & toxicology. 1995;76(2):107-11.

Nylen P, Hagman M. Function of the auditory and visual systems, and of peripheral nerve, in rats after long-term combined exposure to n-hexane and methylated benzene derivatives. II. Xylene. Pharmacology & toxicology. 1994;74(2):124-9.

Nys C, Asselman J, Hochmuth JD, Janssen CR, Blust R, Smolders E, et al. Mixture toxicity of nickel and zinc to *Daphnia magna* is noninteractive at low effect sizes but becomes synergistic at high effect sizes. Environmental toxicology and chemistry. 2015;34(5):1091-102.

Nys C, Van Regenmortel T, Janssen CR, Blust R, Smolders E, De Schamphelaere KAC. Comparison of chronic mixture toxicity of nickel-zinc-copper and nickel-zinc-copper-cadmium mixtures between *Ceriodaphnia dubia* and *Pseudokirchneriella subcapitata*. Environmental toxicology and chemistry. 2017;36(4):1056-66.

Nys C, Van Regenmortel T, Janssen CR, Oorts K, Smolders E, De Schamphelaere KAC. A framework for ecological risk assessment of metal mixtures in aquatic systems. Environmental Toxicology and Chemistry. 2018;37(3):623-42.

Nys C, Versieren L, Cordery KI, Blust R, Smolders E, De Schamphelaere KAC. Systematic Evaluation of Chronic Metal-Mixture Toxicity to Three Species and Implications for Risk Assessment. *Environmental science & technology*. 2017;51(8):4615-23.

Nzabarushimana E, Prior S, Miousse IR, Pathak R, Allen AR, Latendresse J, et al. Combined exposure to protons and (56)Fe leads to overexpression of Il13 and reactivation of repetitive elements in the mouse lung. *Life sciences in space research*. 2015;7:1-8.

Odashima S. Combined effect of carcinogens with different actions. I. Development of liver cancer in the rat by the feeding of 4-dimethylaminostilbene following initial feeding of 4-dimethylaminoazobenzene. *Gan*. 1962;53:247-57.

Odashima S. Combined effect of carcinogens with different actions. III. Development of skin cancer in the rat by feeding 4-dimethylaminostilbene following initial painting of 20-methylcholanthrene. *Gan*. 1962;53:269-74.

Ofoegbu PU, Campos D, Soares A, Pestana JLT. Combined effects of NaCl and fluoxetine on the freshwater planarian, *Schmidtea mediterranea* (Platyhelminthes: DugesIIDae). *Environmental Science and Pollution Research*. 2019;26(11):11326-35.

Oganesian KR, Oganisian AO, Gukasian LE. Lipid peroxidation upon combined exposure to vibration and liquorice preparations. *Gigiena i sanitariia*. 2008(3):80-1.

Oganisyan AO, Oganessian KR, Minasyan SM. Changes in succinate dehydrogenase activity in various parts of the brain during combined exposure to vibration and licorice root. *Neuroscience and behavioral physiology*. 2005;35(5):545-8.

Ogony J, Matthews R, Anni H, Shannon K, Ercal N. The mechanism of elevated toxicity in HepG2 cells due to combined exposure to ethanol and ionizing radiation. *Journal of applied toxicology : JAT*. 2008;28(3):345-55.

Oh KJ, Park JY, Lee J, Hong J-S, Romero R, Yoon BH. The combined exposure to intra-amniotic inflammation and neonatal respiratory distress syndrome increases the risk of intraventricular hemorrhage in preterm neonates. *Journal of perinatal medicine*. 2018;46(1):9-20.

Oh KJ, Park JY, Lee J, Hong JS, Romero R, Yoon BH. The combined exposure to intra-amniotic inflammation and neonatal respiratory distress

syndrome increases the risk of intraventricular hemorrhage in preterm neonates. *Journal of Perinatal Medicine*. 2018;46(1):9-20.

Ojuri OT, Ezekiel CN, Eskola MK, Sarkanj B, Babalola AD, Sulyok M, et al. Mycotoxin co-exposures in infants and young children consuming household- and industrially-processed complementary foods in Nigeria and risk management advice. *Food Control*. 2019;98:312-22.

Okui T, Fujiwara Y. Inhibition of human excision DNA repair by inorganic arsenic and the co-mutagenic effect in V79 Chinese hamster cells. *Mutation research*. 1986;172(1):69-76.

Oladipo OO, Ayo JO, Ambali SF, Mohammed B, Aluwong T. Dyslipdemia induced by chronic low dose co-exposure to lead, cadmium and manganese in rats: the role of oxidative stress. *Environmental toxicology and pharmacology*. 2017;53:199-205.

Olatunji LA, Olaniyi KS, Usman TO, Abolarinwa BA, Achile CJ, Kim I-K. Combined oral contraceptive and nitric oxide synthesis inhibition synergistically causes cardiac hypertrophy and exacerbates insulin resistance in female rats. *Environmental toxicology and pharmacology*. 2017;52:54-61.

Oleszczuk P, Rakowska M, Bucheli TD, Godlewska P, Reible DD. Combined Effects of Plant Cultivation and Sorbing Carbon Amendments on Freely Dissolved PAHs in Contaminated Soil. *Environmental Science & Technology*. 2019;53(9):4860-8.

Olloquequi J, Jaime S, Parra V, Cornejo-Cordova E, Valdivia G, Agusti A, et al. Comparative analysis of COPD associated with tobacco smoking, biomass smoke exposure or both. *Respiratory Research*. 2018;19.

Olsen AO, Dillner J, Skrondal A, Magnus P. Combined effect of smoking and human papillomavirus type 16 infection in cervical carcinogenesis. *Epidemiology (Cambridge, Mass)*. 1998;9(3):346-9.

Olstrup H, Johansson C, Forsberg B, Tornevi A, Ekeboom A, Meister K. A Multi-Pollutant Air Quality Health Index (AQHI) Based on Short-Term Respiratory Effects in Stockholm, Sweden. *International Journal of Environmental Research and Public Health*. 2019;16(1).

Olvera-Vargas H, Zheng X, Garcia-Rodriguez O, Lefebvre O. Sequential "electrochemical peroxidation - Electro-Fenton" process for anaerobic sludge treatment. *Water Research*. 2019;154:277-86.

Omidi M, Niknahad H, Noorafshan A, Fardid R, Nadimi E, Naderi S, et al. Co-exposure to an Aryl Hydrocarbon Receptor Endogenous Ligand, 6-Formylindolo 3,2-b carbazole (FICZ), and Cadmium Induces Cardiovascular Developmental Abnormalities in Mice. *Biological Trace Element Research*. 2019;187(2):442-51.

Ondracek K, Bandouchova H, Damkova V, Hilscherova K, Kral J, Osickova J, et al. Risk of combined exposure of birds to cyanobacterial biomass containing microcystins, acetylcholinesterase inhibitor and anticoagulant. *Neuro endocrinology letters*. 2012;33 Suppl 3:155-60.

Ondracek K, Bandouchova H, Hilscherova K, Kovacova V, Linhart P, Miksikova M, et al. Mixture toxicity of microcystin-LR, paraoxon and bromadiolone in *Xenopus laevis* embryos. *Neuro endocrinology letters*. 2015;36 Suppl 1:114-9.

Ooi DJ, Adamu HA, Imam MU, Ithnin H, Ismail M. Polyphenol-rich ethyl acetate fraction isolated from *Molineria latifolia* ameliorates insulin resistance in experimental diabetic rats via IRS1/AKT activation. *Biomedicine & Pharmacotherapy*. 2018;98:125-33.

Opacka J, Opalska B, Kolakowski J, Wronska-Nofer T. Neurotoxic effects of the combined exposure to carbon disulphide and ethanol in rats. *Toxicology letters*. 1986;32(1-2):9-18.

Orsini N, Bellocco R, Bottai M, Pagano M, Michaelsson K, Wolk A. Combined effects of obesity and physical activity in predicting mortality among men. *Journal of internal medicine*. 2008;264(5):442-51.

Ortega Moreno L, Lamacchia O, Fontana A, Copetti M, Salvemini L, De Bonis C, et al. The combined effect of adiponectin and resistin on all-cause mortality in patients with type 2 diabetes: Evidence of synergism with abdominal adiposity. *Atherosclerosis*. 2016;250:23-9.

Ortiz J, Jacxsens L, Astudillo G, Ballesteros A, Donoso S, Huybregts L, et al. Multiple mycotoxin exposure of infants and young children via breastfeeding and complementary/weaning foods consumption in Ecuadorian highlands. *Food and Chemical Toxicology*. 2018;118:541-8.

Osickova J, Skochova H, Ondracek K, Kral J, Damkova V, Peckova L, et al. Risk of single and combined exposure of birds to non-steroidal anti-inflammatory drugs and lead. *Neuro endocrinology letters*. 2012;33 Suppl 3:145-50.

Osorio V, Schriks M, Vughs D, de Voogt P, Kolkman A. A novel sample preparation procedure for effect-directed analysis of micro-contaminants of emerging concern in surface waters. *Talanta*. 2018;186:527-37.

Ostrofsky D, Lam R, Haider S, Crowley G, Talusan A, Kwon S, et al. Synergistic Interleukin-1 alpha Elaboration Due to World Trade Center Particulate Matter and Lipid Co-Exposure In Vitro Is Not NF-kappa B Dependent. *American Journal of Respiratory and Critical Care Medicine*. 2019;199.

Otani H, Kaya M, Tamaki A, Watson P. Separate and combined effects of exposure to heat stress and mental fatigue on endurance exercise capacity in the heat. *European journal of applied physiology*. 2017;117(1):119-29.

Overmans S, Nordborg M, Diaz-Rua R, Brinkman DL, Negri AP, Agusti S. Phototoxic effects of PAH and UVA exposure on molecular responses and developmental success in coral larvae. *Aquatic Toxicology*. 2018;198:165-74.

Owumi SE, Adedara IA, Duro-Ladipo A, Farombi EO. Acute diethyl nitrosamine and cadmium co-exposure exacerbates deficits in endocrine balance, sperm characteristics and antioxidant defence mechanisms in testes of pubertal rats. *Andrologia*. 2019;51(4).

Oya E, Zegeye FD, Bolling AK, Ovstebo R, Afanou AKJ, Ovrevik J, et al. Hyphae fragments from *A. fumigatus* sensitize lung cells to silica particles (Min-U-Sil): Increased release of IL-1 beta. *Toxicology in Vitro*. 2019;55:1-10.

Ozaki K, Terayama Y, Matsuura T, Narama I. Effect of combined dyslipidemia and hyperglycemia on diabetic peripheral neuropathy in alloxan-induced diabetic WBN/Kob rats. *Journal of Toxicologic Pathology*. 2018;31(2):125-33.

Ozdatli S, Kalkan R, Hatimoglu M, Kilic U, Aydin A. Investigation of possible effect of carnosic acid (CA) on combined exposure to bisphenol A (BPA) and diethyl hexyl phthalate (DEHP). *Toxicology Letters*. 2018;295:S135-S6.

Pachamuthu P, Kamble ST. In vivo study on combined toxicity of *Metarhizium anisopliae* (Deuteromycotina: Hyphomycetes) strain ESC-1 with sublethal doses of chlorpyrifos, propetamphos, and cyfluthrin against German cockroach (Dictyoptera: Blattellidae). *Journal of economic entomology*. 2000;93(1):60-70.

Pacheco A, Martins A, Guilhermino L. Toxicological interactions induced by chronic exposure to gold nanoparticles and microplastics mixtures in *Daphnia magna*. *Science of the Total Environment*. 2018;628-629:474-83.

Pacini N, Dorr AJM, Elia AC, Scoparo M, Abete MC, Prearo M. Melamine-cyanurate complexes and oxidative stress markers in trout kidney following melamine and cyanuric acid long-term co-exposure and withdrawal. *Fish physiology and biochemistry*. 2014;40(5):1609-19.

Pal R, Nath R, Gill KD. Lipid peroxidation and antioxidant defense enzymes in various regions of adult rat brain after co-exposure to cadmium and ethanol. *Pharmacology & toxicology*. 1993;73(4):209-14.

Palikova M, Navratil S, Papezikova I, Ambroz P, Vesely T, Pokorova D, et al. Combined exposure of carps (*Cyprinus carpio* L.) to cyanobacterial biomass and white spot disease. *Neuro endocrinology letters*. 2012;33 Suppl 3:77-83.

Palikova M, Papezikova I, Kopp R, Mares J, Markova Z, Navratil S, et al. Effect of arsenic and cyanobacterial co-exposure on pathological, haematological and immunological parameters of rainbow trout (*Oncorhynchus mykiss*). *Neuro endocrinology letters*. 2015;36 Suppl 1:57-63.

Pallasaho P, Kainu A, Sovijarvi A, Lindqvist A, Piirila PL. Combined effect of smoking and occupational exposure to dusts, gases or fumes on the incidence of COPD. *Copd*. 2014;11(1):88-95.

Pan LL, Sun JT, Le C, Zhu LZ. Effect of copper on the translocation and transformation of polychlorinated biphenyls in rice. *Chemosphere*. 2018;193:514-20.

Pan S, Lin L, Zeng F, Zhang J, Dong G, Yang B, et al. Effects of lead, cadmium, arsenic, and mercury co-exposure on children's intelligence quotient in an industrialized area of southern China. *Environmental pollution (Barking, Essex : 1987)*. 2018;235:47-54.

Pan SX, Lin LF, Zeng F, Zhang JP, Dong GH, Yang BY, et al. Effects of lead, cadmium, arsenic, and mercury co-exposure on children's intelligence quotient in an industrialized area of southern China. *Environmental Pollution*. 2018;235:47-54.

Pan Z, Guo HG, Chen HZ, Wang SM, Sun XW, Zou QP, et al. Microplastics in the Northwestern Pacific: Abundance, distribution, and characteristics. *Science of the Total Environment*. 2019;650:1913-22.

Panchenko EN, Nalcha IF, Dziuba NI. Cerebral hemodynamics in workers subjected to combined exposure to methanol and carbon monoxide vapors. *Vrachebnoe delo*. 1989(7):99-102.

Pandey SP, Mohanty B. Disruption of the hypothalamic-pituitary-thyroid axis on co-exposures to dithiocarbamate and neonicotinoid pesticides: Study in a wildlife bird, *Amandava amandava*. *Neurotoxicology*. 2017;60:16-22.

Pandher U, Kirychuk S, Schneberger D, Thompson B, Aulakh G, Singh B, et al. Co-Exposure of Glyphosate with LPS Enhances Lung Inflammation in Mice. *American Journal of Respiratory and Critical Care Medicine*. 2019;199.

Pandya C, Pillai P, Nampoothiri LP, Bhatt N, Gupta S. Effect of lead and cadmium co-exposure on testicular steroid metabolism and antioxidant system of adult male rats. *Andrologia*. 2012;44 Suppl 1:813-22.

Pandya CD, Pillai PP, Gupta SS. Lead and cadmium co-exposure mediated toxic insults on hepatic steroid metabolism and antioxidant system of adult male rats. *Biological trace element research*. 2010;134(3):307-17.

Pani G, Verslegers M, Quintens R, Samari N, de Saint-Georges L, van Oostveldt P, et al. Combined Exposure to Simulated Microgravity and Acute or Chronic Radiation Reduces Neuronal Network Integrity and Survival. *PloS one*. 2016;11(5):e0155260.

Pankow D, Ponsold W. Combined effects of carbon monoxide and other biologically active harmful factors on the organism. *Zeitschrift fur die gesamte Hygiene und ihre Grenzgebiete*. 1974;20(9):561-71.

Panov VG, Katsnelson BA, Varaksin AN, Privalova LI, Kireyeva EP, Sutunkova MP, et al. Further development of mathematical description for combined toxicity: A case study of lead-fluoride combination. *Toxicology reports*. 2015;2:297-307.

Panseri S, Chiesa L, Ghisleni G, Marano G, Boracchi P, Ranghieri V, et al. Persistent organic pollutants in fish: biomonitoring and cocktail effect with implications for food safety. *Food Additives and Contaminants Part a-Chemistry Analysis Control Exposure & Risk Assessment*. 2019;36(4):601-11.

Pant R, Jangra A, Kwatra M, Singh T, Kushwah P, Bezbaruah BK, et al. Cognitive deficits induced by combined exposure of stress and alcohol mediated through oxidative stress-PARP pathway in the hippocampus. *Neuroscience letters*. 2017;653:208-14.

Paolini M, Cantelli-Forti G, Perocco P, Pedulli GF, Abdel-Rahman SZ, Legator MS. Co-carcinogenic effect of beta-carotene. *Nature*. 1999;398(6730):760-1.

Papathanasiou T, Strathe A, Hooker AC, Lund TM, Overgaard RV. Feasibility of Exposure-Response Analyses for Clinical Dose-Ranging Studies of Drug Combinations. *Aaps Journal*. 2018;20(3).

Parada J, Rubilar O, Diez MC, Cea M, da Silva AS, Rodriguez-Rodriguez CE, et al. Combined pollution of copper nanoparticles and atrazine in soil: Effects on dissipation of the pesticide and on microbiological community profiles. *Journal of Hazardous Materials*. 2019;361:228-36.

Paran'ko NM. Regional vascular reactions in separate and simultaneous exposure to vibration and cold. *Gigiena truda i professional'nye zabolevaniia*. 1969;13(6):36-8.

Parihar CM, Parihar MD, Sapkota TB, Nanwal RK, Singh AK, Jat SL, et al. Long-term impact of conservation agriculture and diversified maize rotations on carbon pools and stocks, mineral nitrogen fractions and nitrous oxide fluxes in inceptisol of India. *Science of the Total Environment*. 2018;640:1382-92.

Park C-B, Jang J, Kim S, Kim YJ. Single- and mixture toxicity of three organic UV-filters, ethylhexyl methoxycinnamate, octocrylene, and avobenzone on *Daphnia magna*. *Ecotoxicology and environmental safety*. 2017;137:57-63.

Park CH, Amare M, Morrison FS, Maloney TR, Goodwin JW. Chemotherapy sensitivity assessment of leukemic colony-forming cells with in vitro simultaneous exposure to multiple drugs: clinical correlations in acute nonlymphocytic leukemia. *Cancer treatment reports*. 1982;66(6):1257-61.

Park H, Lee K, Moon C-S, Woo K, Kang T-S, Chung E-K, et al. Simultaneous Exposure to Heavy Metals among Residents in the Industrial Complex: Korean National Cohort Study. *International journal of environmental research and public health*. 2015;12(6):5905-17.

Park J, Lee H, Park K. Mixture Toxicity of Methylisothiazolinone and Propylene Glycol at a Maximum Concentration for Personal Care Products. *Toxicological Research*. 2018;34(4):355-61.

Park MS, Park KH, Bahk GJ. Combined influence of multiple climatic factors on the incidence of bacterial foodborne diseases. *Science of the Total Environment*. 2018;610:10-6.

Park MS, Park KH, Bahk GJ. Interrelationships between Multiple Climatic Factors and Incidence of Foodborne Diseases. *International Journal of Environmental Research and Public Health*. 2018;15(11).

Parveen M, Asaeda T, Rashid MH. Biochemical adaptations of four submerged macrophytes under combined exposure to hypoxia and hydrogen sulphide. *PloS one*. 2017;12(8):e0182691.

Parvez F, Lauer FT, Factor-Litvak P, Liu XH, Santella RM, Islam T, et al. Assessment of arsenic and polycyclic aromatic hydrocarbon (PAH) exposures on immune function among males in Bangladesh. *Plos One*. 2019;14(5).

Pascale A, Amadio M, Caffino L, Racagni G, Govoni S, Fumagalli F. ELAV-GAP43 pathway activation following combined exposure to cocaine and stress. *Psychopharmacology*. 2011;218(1):249-56.

Pasetto R, Mattioli B, Marsili D. Environmental Justice in Industrially Contaminated Sites. A Review of Scientific Evidence in the WHO European Region. *International Journal of Environmental Research and Public Health*. 2019;16(6).

Paskalev Z, Apostolova D. A health status study of the population subjected to combined exposures to ionizing and nonionizing radiation factors. *Problemi na khigienata*. 1996;21:131-4.

Paskova V, Veronika P, Paskerova H, Hana P, Pikula J, Jiri P, et al. Combined exposure of Japanese quails to cyanotoxins, Newcastle virus and lead: oxidative stress responses. *Ecotoxicology and environmental safety*. 2011;74(7):2082-90.

Pasparakis C, Sweet LE, Stieglitz JD, Benetti D, Casente CT, Roberts AP, et al. Combined effects of oil exposure, temperature and ultraviolet radiation on buoyancy and oxygen consumption of embryonic mahi-mahi, *Coryphaena hippurus*. *Aquatic toxicology (Amsterdam, Netherlands)*. 2017;191:113-21.

Passos-Soares JD, Santos LPD, da Cruz SS, Trindade SC, Cerqueira EDM, Santos KOB, et al. The impact of caries in combination with periodontitis on oral health-related quality of life in Bahia, Brazil. *Journal of Periodontology*. 2018;89(12):1407-17.

Pastore M, Santaefemia S, Bertucco A, Sforza E. Light intensity affects the mixotrophic carbon exploitation in *Chlorella protothecoides*: consequences on microalgae-bacteria based wastewater treatment. *Water Science and Technology*. 2018;78(8):1762-71.

Patel E, Lynch C, Ruff V, Reynolds M. Co-exposure to nickel and cobalt chloride enhances cytotoxicity and oxidative stress in human lung epithelial cells. *Toxicology and applied pharmacology*. 2012;258(3):367-75.

Pawlik-Skowronska B, Toporowska M, Mazur-Marzec H. Effects of secondary metabolites produced by different cyanobacterial populations on the freshwater zooplankters *Brachionus calyciflorus* and *Daphnia pulex*. *Environmental Science and Pollution Research*. 2019;26(12):11793-804.

Payne-Sturges DC, Scammell MK, Levy JI, Cory-Slechta DA, Symanski E, Shmool JLC, et al. Methods for Evaluating the Combined Effects of Chemical and Nonchemical Exposures for Cumulative Environmental Health Risk Assessment. *International Journal of Environmental Research and Public Health*. 2018;15(12).

Pekkarinen J, Starck J. Digital high-speed sampling of combined exposure to noise and vibration. *Scandinavian journal of work, environment & health*. 1986;12(4 Spec No):327-31.

Pelon W, Luftig RB, Johnston KH. *Vibrio vulnificus* load reduction in oysters after combined exposure to *Vibrio vulnificus*--specific bacteriophage and to an oyster extract component. *Journal of food protection*. 2005;68(6):1188-91.

Pence BC, Buddingh F. Co-carcinogenic effect of carbon black ingestion with dietary fat on the development of colon tumors in rats. *Toxicology letters*. 1987;37(2):177-82.

Peneda J, Baptista A. The effect of combined toxicity on the development of alcoholic pancreatic lesions. A long-term experimental trial. *Acta medica portuguesa*. 1995;8(3):137-43.

Penttinen P, Huttunen K, Pelkonen J, Hirvonen M-R. The proportions of *Streptomyces californicus* and *Stachybotrys chartarum* in simultaneous exposure affect inflammatory responses in mouse RAW264.7 macrophages. *Inhalation toxicology*. 2005;17(2):79-85.

Peplonska B, Burdelak W, Bukowska A, Kryszka J, Konieczko K. Night shift work characteristics and occupational co-exposures in industrial plants in Lodz, Poland. *International journal of occupational medicine and environmental health*. 2013;26(4):522-34.

Peraza-Castro M, Ruiz-Romera E, Meaurio M, Sauvage S, Sanchez-Perez JM. Modelling the impact of climate and land cover change on hydrology and water quality in a forest watershed in the Basque Country (Northern Spain). *Ecological Engineering*. 2018;122:315-26.

Pereira C, Mapuskar K, Vaman Rao C. A two-generation chronic mixture toxicity study of Clophen A60 and diethyl phthalate on histology of adrenal cortex and thyroid of rats. *Acta histochemica*. 2007;109(1):29-36.

Perera FP, Wheelock K, Wang Y, Tang D, Margolis AE, Badia G, et al. Combined effects of prenatal exposure to polycyclic aromatic hydrocarbons and material hardship on child ADHD behavior problems. *Environmental research*. 2018;160:506-13.

Pererea FP, Wheelock K, Wang Y, Tang DL, Margolis AE, Badia G, et al. Combined effects of prenatal exposure to polycyclic aromatic hydrocarbons and material hardship on child ADHD behavior problems. *Environmental Research*. 2018;160:506-13.

Perez E, Hoang TC. Responses of *Daphnia magna* to chronic exposure of cadmium and nickel mixtures. *Chemosphere*. 2018;208:991-1001.

Perez-Carreón JJ, Dargent C, Merhi M, Fattel-Fazenda S, Arce-Popoca E, Villa-Trevino S, et al. Tumor promoting and co-carcinogenic effects in medium-term rat hepatocarcinogenesis are not modified by co-administration of 12 pesticides in mixture at acceptable daily intake. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2009;47(3):540-6.

Peric L, Buric P. The effect of copper and chlorpyrifos co-exposure on biomarkers in the marine mussel *Mytilus galloprovincialis*. *Chemosphere*. 2019;225:126-34.

Perret JL, Walters EH, Abramson MJ, McDonald CF, Dharmage SC. The independent and combined effects of lifetime smoke exposures and asthma as they relate to COPD. *Expert review of respiratory medicine*. 2014;8(4):503-14.

Petersen K, Tollefsen KE. Assessing combined toxicity of estrogen receptor agonists in a primary culture of rainbow trout (*Oncorhynchus mykiss*) hepatocytes. *Aquatic toxicology (Amsterdam, Netherlands)*. 2011;101(1):186-95.

Petrescu AD, Grant S, Frampton G, McMillin M, Kain J, Kodali M, et al. Gulf war illness-related chemicals increase CD11b/c(+) monocyte infiltration into the liver and aggravate hepatic cholestasis in a rodent model. *Scientific Reports*. 2018;8.

Petrinec B, Sostaric M, Babic D. The role of physics in radioecology and radiotoxicology. *Arhiv Za Higijenu Rada I Toksikologiju-Archives of Industrial Hygiene and Toxicology*. 2019;70(1):3-13.

Petrou K, Nielsen DA, Heraud P. Single-Cell Biomolecular Analysis of Coral Algal Symbionts Reveals Opposing Metabolic Responses to Heat Stress and Expulsion. *Frontiers in Marine Science*. 2018;5.

Pettersson H, Burstrom L, Nilsson T. The effect on the temporary threshold shift in hearing acuity from combined exposure to authentic noise and hand-arm vibration. *International archives of occupational and environmental health*. 2011;84(8):951-7.

Pham B, Miranda A, Allinson G, Nugegoda D. Assessing interactive mixture toxicity of carbamate and organophosphorus insecticides in the yabby (*Cherax destructor*). *Ecotoxicology*. 2018;27(9):1217-24.

Philippe C, Gregoir AF, Thore ESJ, Brendonck L, De Boeck G, Pinceel T. Acute sensitivity of the killifish *Nothobranchius furzeri* to a combination of temperature and reference toxicants (cadmium, chlorpyrifos and 3,4-dichloroaniline). *Environmental Science and Pollution Research*. 2018;25(10):10029-38.

Philippe C, Hautekiet P, Gregoir AF, Thore ESJ, Pinceel T, Stoks R, et al. Combined effects of cadmium exposure and temperature on the annual killifish (*Nothobranchius furzeri*). *Environmental Toxicology and Chemistry*. 2018;37(9):2361-71.

Philippot G, Stenerlow B, Fredriksson A, Sundell-Bergman S, Eriksson P, Buratovic S. Developmental effects of neonatal fractionated co-exposure to low-dose gamma radiation and paraquat on behaviour in adult mice. *Journal of Applied Toxicology*. 2019;39(4):582-9.

Phoa FKH, Xu H, Wong WK. The use of nonregular fractional factorial designs in combination toxicity studies. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2009;47(9):2183-8.

Phyu YL, Palmer CG, Warne MSJ, Hose GC, Chapman JC, Lim RP. A comparison of mixture toxicity assessment: examining the chronic toxicity of atrazine, permethrin and chlorothalonil in mixtures to *Ceriodaphnia cf. dubia*. *Chemosphere*. 2011;85(10):1568-73.

Pierce DR, Kane CJ, Serbus DC, Light KE. Microencephaly and selective decreases in cerebellar Purkinje cell numbers following combined exposure to ethanol and methadone during rat brain development. *Developmental neuroscience*. 1997;19(5):438-45.

Piercy KT, Donnell RL, Kirkpatrick SS, Timaran CH, Stevens SL, Freeman MB, et al. Effects of estrogen, progesterone, and combination exposure on interleukin-1 beta-induced expression of VCAM-1, ICAM-1, PECAM, and E-

selectin by human female iliac artery endothelial cells. *The Journal of surgical research*. 2002;105(2):215-9.

Pikula J, Bandouchova H, Hilscherova K, Paskova V, Sedlackova J, Adamovsky O, et al. Combined exposure to cyanobacterial biomass, lead and the Newcastle virus enhances avian toxicity. *The Science of the total environment*. 2010;408(21):4984-92.

Pilat-Marcinkiewicz B, Brzoska MM, Kasacka I, Sawicki B. Histological evaluation of the thyroid structure after co-exposure to cadmium and ethanol. *Roczniki Akademii Medycznej w Białymstoku* (1995). 2004;49 Suppl 1:152-4.

Pillai A, Laxmi Priya PN, Gupta S. Effects of combined exposure to lead and cadmium on pituitary membrane of female rats. *Archives of toxicology*. 2002;76(12):671-5.

Pillai A, Priya L, Gupta S. Effects of combined exposure to lead and cadmium on the hypothalamic-pituitary axis function in proestrous rats. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2003;41(3):379-84.

Pirani M, Best N, Blangiardo M, Liverani S, Atkinson RW, Fuller GW. Analysing the health effects of simultaneous exposure to physical and chemical properties of airborne particles. *Environment international*. 2015;79:56-64.

Pires A, Almeida A, Calisto V, Schneider RJ, Esteves VI, Wrona FJ, et al. Hediste diversicolor as bioindicator of pharmaceutical pollution: Results from single and combined exposure to carbamazepine and caffeine. *Comparative biochemistry and physiology Toxicology & pharmacology : CBP*. 2016;188:30-8.

Piza DM, Romanenko SN, Semenov DS. CORRELATION METHOD FOR FORMING THE TRAINING SAMPLE FOR ADAPTATION OF THE SPATIAL FILTER. *Radio Electronics Computer Science Control*. 2018(3):34-9.

Platonov AE, Vershinina IV, Serebrovskaia LV, Shepeleva GK. Membrane-attacking complexes and membrane complement inhibitors on the leukocyte surface during combined exposure with meningococcus lipopolysaccharide and complement. *Biulleten' eksperimental'noi biologii i meditsiny*. 1999;127(4):433-8.

Plitman SI, Khvastunov RM, Morozova LF, Lastochkina KO. Study of water odor intensity after combined exposure to chemical substances. *Gigiena i sanitariia*. 1990(11):29-32.

Poch G, Dittrich P, Reiffenstein RJ, Lenk W, Schuster A. Evaluation of experimental combined toxicity by use of dose-frequency curves: comparison with

theoretical additivity as well as independence. Canadian journal of physiology and pharmacology. 1990;68(10):1338-45.

Poel WE. Progesterone and the prolonged progestational state: co-carcinogenic factors in mammary tumor induction. British journal of cancer. 1965;19(4):824-9.

Pohl HR, Ruiz P, Scinicariello F, Mumtaz MM. Joint toxicity of alkoxyethanol mixtures: contribution of in silico applications. Regulatory toxicology and pharmacology : RTP. 2012;64(1):134-42.

Pomerantseva MD, Ramaia LK, Liaginskaia AM. Frequency of dominant lethal mutations induced by combined exposure to incorporated ¹³⁷Cs and external gamma-irradiation in mice. Genetika. 2000;36(10):1414-6.

Popova IA, Sanososiuk TM, Buravkova LB. Clinical-biochemical parameters of blood in humans exposed to the combined effects of short-term head-down tilt and isolation. Aviakosmicheskaja i ekologicheskaja meditsina = Aerospace and environmental medicine. 2004;38(1):42-8.

Porsbring T, Backhaus T, Johansson P, Kuylenstierna M, Blanck H. Mixture toxicity from photosystem II inhibitors on microalgal community succession is predictable by concentration addition. Environmental toxicology and chemistry. 2010;29(12):2806-13.

Posthuma L, van Gils J, Zijp MC, van de Meent D, de Zwart D. Species sensitivity distributions for use in environmental protection, assessment, and management of aquatic ecosystems for 12 386 chemicals. Environmental Toxicology and Chemistry. 2019;38(4):905-17.

Potapov IN, Pashkova VS, Krutova TV, Khaleev DV. Changes in the morphology of the thymus and spleen of healthy mice in combined exposure to nitrosomethylurea and immunomodulators. Izvestiia Akademii nauk Seriia biologicheskaja. 1993(3):465-8.

Pouil S, Clausing RJ, Metian M, Bustamante P, Bottein MYD. The role of marine biotoxins on the trophic transfer of Mn and Zn in fish. Aquatic Toxicology. 2018;198:198-205.

Pouil S, Clausing RJ, Metian M, Bustamante P, Dechraoui-Bottein MY. A study of the influence of brevetoxin exposure on trace element bioaccumulation in the blue mussel *Mytilus edulis*. Journal of Environmental Radioactivity. 2018;192:250-6.

Pouladi B, Fanaei MA, Baghmisheh G. Optimization of oxidative desulfurization of gas condensate via response surface methodology approach. *Journal of Cleaner Production*. 2019;209:965-77.

Prado P, Alcaraz C, Benito X, Caiola N, Ibanez C. Pristine vs. human-altered Ebro Delta habitats display contrasting resilience to RSLR. *Science of the Total Environment*. 2019;655:1376-86.

Prata JC, Lavorante B, Montenegro M, Guilhermino L. Influence of microplastics on the toxicity of the pharmaceuticals procainamide and doxycycline on the marine microalgae *Tetraselmis chuii*. *Aquatic Toxicology*. 2018;197:143-52.

Prato E, Biandolino F. Combined toxicity of mercury, copper and cadmium on embryogenesis and early larval stages of the *Mytilus galloprovincialis*. *Environmental technology*. 2007;28(8):915-20.

Price P, Zaleski R, Hollnagel H, Ketelslegers H, Han X. Assessing the safety of co-exposure to food packaging migrants in food and water using the maximum cumulative ratio and an established decision tree. *Food additives & contaminants Part A, Chemistry, analysis, control, exposure & risk assessment*. 2014;31(3):414-21.

Price PJ, Auletta AE, King MP, Hugunin PM, Huebner RJ. The co-carcinogenic activity of 4-nitropyridine-1-oxide (4-NPO) and prevention of transformation by type-specific anti-viral antibodies. *In vitro*. 1976;12(8):595-8.

Price PS, Hollnagel HM, Zabik JM. Characterizing the noncancer toxicity of mixtures using concepts from the TTC and quantitative models of uncertainty in mixture toxicity. *Risk analysis : an official publication of the Society for Risk Analysis*. 2009;29(11):1534-48.

Priya PNL, Pillai A, Gupta S. Effect of simultaneous exposure to lead and cadmium on gonadotropin binding and steroidogenesis on granulosa cells: an in vitro study. *Indian journal of experimental biology*. 2004;42(2):143-8.

Priya T, Tarafdar A, Gupta B, Mishra BK. Effect of bioflocculants on the coagulation activity of alum for removal of trihalomethane precursors from low turbid water. *Journal of Environmental Sciences*. 2018;70:1-10.

Prokhonchukov AA, Komissarova NA, Kolesnik AG, Novikov LL. Effect of the combined exposure to ionizing radiation and weightlessness on the calcium and phosphorus content in the mineral fraction of rat calcified skeletal tissues. *Radiobiologia*. 1979;19(5):760-2.

Protogerou AD, Safar ME, Papaioannou TG, Zhang Y, Agnoletti D, Papadogiannis D, et al. The combined effect of aortic stiffness and pressure wave reflections on mortality in the very old with cardiovascular disease: the PROTEGER Study. *Hypertension research : official journal of the Japanese Society of Hypertension*. 2011;34(7):803-8.

Pruimboom L, Fox T, Muskiet FAJ. Lactase persistence and augmented salivary alpha-amylase gene copy numbers might have been selected by the combined toxic effects of gluten and (food born) pathogens. *Medical hypotheses*. 2014;82(3):326-34.

Puckowski A, Stolte S, Wagil M, Markiewicz M, Lukaszewicz P, Stepnowski P, et al. Mixture toxicity of flubendazole and fenbendazole to *Daphnia magna*. *International journal of hygiene and environmental health*. 2017;220(3):575-82.

Pyo MC, Shin HS, Lee HS, Bae JM, Lee KW. Effects of Individual and Combined Toxicity of Ochratoxin A, Acrylamide on Oxidative Stress in Human Proximal Tubule HK-2 Cells. *Faseb Journal*. 2018;32(1).

Qazi TH, Berkmann JC, Schoon J, Geiler S, Duda GN, Boccaccini AR, et al. Dosage and composition of bioactive glasses differentially regulate angiogenic and osteogenic response of human MSCs. *Journal of Biomedical Materials Research Part A*. 2018;106(11):2827-37.

Qi BX, Shi Y, Jialiang B, Iop. Study on Collapse Mechanism of Steel Frame Structure under High Temperature and Blast Loading. 3rd International Conference on Energy Equipment Science and Engineering. IOP Conference Series-Earth and Environmental Science. 1282018.

Qian J, Ding Q, Guo A, Zhang D, Wang K. Alteration in successional trajectories of bacterioplankton communities in response to co-exposure of cadmium and phenanthrene in coastal water microcosms. *Environmental pollution (Barking, Essex : 1987)*. 2017;221:480-90.

Qian L, Qi SZ, Cao FJ, Zhang J, Li CP, Song M, et al. Effects of penthiopyrad on the development and behaviour of zebrafish in early-life stages. *Chemosphere*. 2019;214:184-94.

Qian Q, Wang T-c, Song Y-s, Wang L, Li Y-h, Yu S-f, et al. Effect of occupational combined exposure of chromium and iron on erythrocyte metabolism. *Zhonghua yu fang yi xue za zhi [Chinese journal of preventive medicine]*. 2012;46(4):355-8.

Qin LT, Chen YH, Zhang X, Mo LY, Zeng HH, Liang YP. QSAR prediction of additive and non-additive mixture toxicities of antibiotics and pesticide. *Chemosphere*. 2018;198:122-9.

Qin L-T, Chen Y-H, Zhang X, Mo L-Y, Zeng H-H, Liang Y-P. QSAR prediction of additive and non-additive mixture toxicities of antibiotics and pesticide. *Chemosphere*. 2018;198:122-9.

Qin L-T, Wu J, Mo L-Y, Zeng H-H, Liang Y-P. Linear regression model for predicting interactive mixture toxicity of pesticide and ionic liquid. *Environmental science and pollution research international*. 2015;22(16):12759-68.

Qiu J, Zhu G, Chen X, Shao C, Gu S. Combined effects of gamma-irradiation and cadmium exposures on osteoblasts in vitro. *Environmental toxicology and pharmacology*. 2012;33(2):149-57.

Qiu JX, Carpenter SR, Booth EG, Motew M, Zipper SC, Kucharik CJ, et al. Understanding relationships among ecosystem services across spatial scales and over time. *Environmental Research Letters*. 2018;13(5).

Qiu XC, Iwasaki N, Chen K, Shimasaki Y, Oshima Y. Tributyltin and perfluorooctane sulfonate play a synergistic role in promoting excess fat accumulation in Japanese medaka (*Oryzias latipes*) via in ovo exposure. *Chemosphere*. 2019;220:687-95.

Qiu XC, Kim S, Kang IJ, Hano T, Shimasaki Y, Oshima Y. Combined toxicities of tributyltin and polychlorinated biphenyls on the development and hatching of Japanese medaka (*Oryzias latipes*) embryos via in ovo nanoinjection. *Chemosphere*. 2019;225:927-34.

Qu D, Gu Y, Feng L, Han J. High Content Analysis technology for evaluating the joint toxicity of sunset yellow and sodium sulfite in vitro. *Food chemistry*. 2017;233:135-43.

Qu DF, Jiang MX, Huang DP, Zhang H, Feng LF, Chen YW, et al. Synergistic Effects of The Enhancements to Mitochondrial ROS, p53 Activation and Apoptosis Generated by Aspartame and Potassium Sorbate in HepG2 Cells. *Molecules*. 2019;24(3).

Qu H, Ma RX, Wang B, Yang J, Duan L, Yu G. Enantiospecific toxicity, distribution and bioaccumulation of chiral antidepressant venlafaxine and its metabolite in loach (*Misgurnus anguillicaudatus*) co-exposed to microplastic and the drugs. *Journal of Hazardous Materials*. 2019;370:203-11.

Qu H, Ma RX, Wang B, Zhang YZ, Yin LN, Yu G, et al. Effects of microplastics on the uptake, distribution and biotransformation of chiral antidepressant venlafaxine in aquatic ecosystem. *Journal of Hazardous Materials*. 2018;359:104-12.

Qu MJ, Ding JW, Wang Y, Chen SY, Zhang YF, Di YA. Genetic impacts induced by BaP and Pb in *Mytilus coruscus*: Can RAPD be a validated tool in genotoxicity evaluation both in vivo and in vitro? *Ecotoxicology and Environmental Safety*. 2019;169:529-38.

Qu R, Liu J, Wang L, Wang Z. The toxic effect and bioaccumulation in aquatic oligochaete *Limnodrilus hoffmeisteri* after combined exposure to cadmium and perfluorooctane sulfonate at different pH values. *Chemosphere*. 2016;152:496-502.

Qu R, Liu SS, Li T, Liu HL. Using an interpolation-based method (IDVeq) to predict the combined toxicities of hormetic ionic liquids. *Chemosphere*. 2019;217:669-79.

Qu R, Wang X, Wang Z, Wei Z, Wang L. Metal accumulation and antioxidant defenses in the freshwater fish *Carassius auratus* in response to single and combined exposure to cadmium and hydroxylated multi-walled carbon nanotubes. *Journal of hazardous materials*. 2014;275:89-98.

Qu S, Wang LC, Lin AW, Zhu HJ, Yuan MX. What drives the vegetation restoration in Yangtze River basin, China: Climate change or anthropogenic factors? *Ecological Indicators*. 2018;90:438-50.

Queiros L, Vidal T, Nogueira AJA, Goncalves FJM, Pereira JL. Mixture toxicity assisting the design of eco-friendlier plant protection products: a case-study using a commercial herbicide combining nicosulfuron and terbuthylazine. *Scientific Reports*. 2018;8.

Queiros L, Vidal T, Nogueira AJA, Goncalves FJM, Pereira JL. Mixture toxicity assisting the design of eco-friendlier plant protection products: a case-study using a commercial herbicide combining nicosulfuron and terbuthylazine. *Scientific reports*. 2018;8(1):5547.

Quinteros DA, Hansen AW, Bellaver B, Bobermin LD, Pulcinelli RR, Bandiera S, et al. Combined Exposure to Alcohol and Tobacco Smoke Changes Oxidative, Inflammatory, and Neurotrophic Parameters in Different Areas of the Brains of Rats. *Acs Chemical Neuroscience*. 2019;10(3):1336-46.

Ra JS, Lee BC, Chang NI, Kim SD. Estimating the combined toxicity by two-step prediction model on the complicated chemical mixtures from wastewater treatment plant effluents. *Environmental toxicology and chemistry*. 2006;25(8):2107-13.

Rabinovitch N, Strand M. Potency of Low Level Co-Exposures to Ambient and Tobacco Smoke-Derived Particles in Children with Asthma. *American Journal of Respiratory and Critical Care Medicine*. 2019;199.

Raffel TR, Halstead NT, McMahon TA, Davis AK, Rohr JR. Temperature variability and moisture synergistically interact to exacerbate an epizootic disease. *Proceedings Biological sciences*. 2015;282(1801):20142039.

Raffler N, Hermanns I, Sayn D, Gores B, Ellegast R, Rissler J. Assessing combined exposures of whole-body vibration and awkward posture--further results from application of a simultaneous field measurement methodology. *Industrial health*. 2010;48(5):638-44.

Raffler N, Rissler J, Ellegast R, Schikowsky C, Kraus T, Ochsmann E. Combined exposures of whole-body vibration and awkward posture: a cross sectional investigation among occupational drivers by means of simultaneous field measurements. *Ergonomics*. 2017;60(11):1564-75.

Rahimpour F, Rafiei Manesh E, Jarahi L, Eghbali S. Assessing the Effect of Simultaneous Exposure to Noise and Cigarette Smoke on Workers' Blood Pressure. *Iranian journal of otorhinolaryngology*. 2016;28(89):413-9.

Rahman MM, Ukiana J, Uson-Lopez R, Sikder MT, Saito T, Kurasaki M. Cytotoxic effects of cadmium and zinc co-exposure in PC12 cells and the underlying mechanism. *Chemico-biological interactions*. 2017;269:41-9.

Rahman MM, Uson-Lopez RA, Sikder MT, Tan GX, Hosokawa T, Saito T, et al. Ameliorative effects of selenium on arsenic-induced cytotoxicity in PC12 cells via modulating autophagy/apoptosis. *Chemosphere*. 2018;196:453-66.

Rahman MS, Thomas P. Interactive effects of hypoxia and PCB co-exposure on expression of CYP1A and its potential regulators in Atlantic croaker liver. *Environmental Toxicology*. 2018;33(4):411-21.

Rahmani A, Asadi A, Fatehizadeh A, Rahmani AR, Zare MR. Interactions of Cd, Cr, Pb, Ni, and Hg in their effects on activated sludge bacteria by using two analytical methods. *Environmental Monitoring and Assessment*. 2019;191(3).

Raiesi F, Razmkhah M, Kiani S. Salinity stress accelerates the effect of cadmium toxicity on soil N dynamics and cycling: Does joint effect of these stresses matter? *Ecotoxicology and Environmental Safety*. 2018;153:160-7.

Raina P, Gilsing A, Freisling H, van den Heuvel E, Sohel N, Jenab M, et al. The Combined Effect of Cancer and Cardio-Metabolic Conditions on the Mortality Burden in Older Adults. *The journals of gerontology Series A, Biological sciences and medical sciences*. 2018.

Rainieri S, Conlledo N, Larsen BK, Granby K, Barranco A. Combined effects of microplastics and chemical contaminants on the organ toxicity of zebrafish (*Danio rerio*). *Environmental Research*. 2018;162:135-43.

Rajkovic V, Matavulj M, Johansson O. Combined exposure of peripubertal male rats to the endocrine-disrupting compound atrazine and power-frequency electromagnetic fields causes degranulation of cutaneous mast cells: a new toxic environmental hazard? *Archives of environmental contamination and toxicology*. 2010;59(2):334-41.

Rajneesh, Pathak J, Richa, Hader DP, Sinha RP. Impacts of ultraviolet radiation on certain physiological and biochemical processes in cyanobacteria inhabiting diverse habitats. *Environmental and Experimental Botany*. 2019;161:375-87.

Rakitskii V, Sinitskaya T. The mechanism for potentiation of the combined effects of 2,4-D and methylmercury in warm-blooded organisms. *Toxicology Letters*. 2018;295:S195-S6.

Rakitskii VN, Daniliuk VP. Use of the method of mathematical planning of an experiment for evaluation of harmful combined effects of xenobiotics on the general sanitary condition of water reservoirs. *Gigiena i sanitariia*. 1992(2):72-3.

Ralston NVC. Effects of soft electrophiles on selenium physiology. *Free Radical Biology and Medicine*. 2018;127:134-44.

Ramvalho JC, Rodrigues AP, Lidon FC, Marques LMC, Leitaó AE, Fortunato AS, et al. Stress cross-response of the antioxidative system promoted by superimposed drought and cold conditions in *Coffea* spp. *Plos One*. 2018;13(6).

Ramchandani AG, D'Souza AV, Borges AM, Bhisey RA. Evaluation of carcinogenic/co-carcinogenic activity of a common chewing product, pan masala, in mouse skin, stomach and esophagus. *International journal of cancer*. 1998;75(2):225-32.

Ramhoj L, Hass U, Boberg J, Scholze M, Christiansen S, Nielsen F, et al. Perfluorohexane Sulfonate (PFHxS) and a Mixture of Endocrine Disruptors Reduce Thyroxine Levels and Cause Antiandrogenic Effects in Rats. *Toxicological Sciences*. 2018;163(2):579-91.

Ramo RA, van den Brink PJ, Ruepert C, Castillo LE, Gunnarsson JS. Environmental risk assessment of pesticides in the River Madre de Dios, Costa Rica using PERPEST, SSD, and msPAF models. *Environmental Science and Pollution Research*. 2018;25(14):13254-69.

Rana SV, Kumar S. Lipid peroxidation in liver, kidney and brain of rats after combined exposure to xylene, toluene and methyl alcohol. *Indian journal of experimental biology*. 1994;32(12):919-21.

Randrianjafizanaka MT, Autfray P, Andrianavo AP, Ramonta IR, Rodenburg J. Combined effects of cover crops, mulch, zero-tillage and resistant varieties on *Striga asiatica* (L.) Kuntze in rice-maize rotation systems. *Agriculture Ecosystems & Environment*. 2018;256:23-33.

Ranjan A, Dumka VK, Singh ND. Effect of flubendiamide, lead and their combined exposure on erythrocytic indices in water buffalo calves. *Bulletin of environmental contamination and toxicology*. 2014;92(4):410-4.

Rao DB, Moore DR, Reinke LA, Fechter LD. Free radical generation in the cochlea during combined exposure to noise and carbon monoxide: an electrophysiological and an EPR study. *Hearing research*. 2001;161(1-2):113-22.

Raskosha OV, Ermakova OV. The peculiarities of separate and combined exposure to low dose-rate gamma-radiation and ²³²Th nitrate on thyroid gland. *Radiatsionnaia biologiiia, radioecologiiia*. 2005;45(6):744-50.

Rastghalam ZS, Cheng T, Freake B. Fine particle attachment to quartz sand in the presence of multiple interacting dissolved components. *Science of the Total Environment*. 2018;645:499-508.

Ray DE, Burr SA, Lister T. The effects of combined exposure to the pyrethroids deltamethrin and S-bioallethrin on hippocampal inhibition and skeletal muscle hyperexcitability in rats. *Toxicology and applied pharmacology*. 2006;216(2):354-62.

Ray JH, Altenburg LC, Jacobs MM. Effect of sodium selenite and methyl methanesulfonate or N-hydroxy-2-acetylaminofluorene co-exposure on sister-chromatid exchange production in human whole blood cultures. *Mutation research*. 1978;57(3):359-68.

Raynor PC, Engelman S, Murphy D, Ramachandran G, Bender JB, Alexander BH. Effects of Gestation Pens Versus Stalls and Wet Versus Dry Feed on Air Contaminants in Swine Production. *Journal of Agromedicine*. 2018;23(1):40-51.

Read LT, Hahn RW, Thompson CC, Bauer DL, Norton EB, Clements JD. Simultaneous exposure to *Escherichia coli* heat-labile and heat-stable enterotoxins increases fluid secretion and alters cyclic nucleotide and cytokine production by intestinal epithelial cells. *Infection and immunity*. 2014;82(12):5308-16.

Rebolledo UA, Nandini S, Sanchez OE, Sarma SSS. Combined effects of temperature and salinity on the demographic response of *Proales similis* (Beauchamp, 1907) and *Brachionus plicatilis* (Muller, 1786) (Rotifera) to mercury. *Chemosphere*. 2018;202:312-21.

Reboud S, Pageaut G. Co-carcinogenic effect of progesterone on 20-methylcholanthrene induced cervical carcinoma in mice. *Nature*. 1973;241(5389):398-9.

Ren Y, Ichinose T, He M, Arashidani K, Yoshida Y, Yoshida S, et al. Aggravation of ovalbumin-induced murine asthma by co-exposure to desert-dust and organic chemicals: an animal model study. *Environmental health : a global access science source*. 2014;13:83.

Ren Y, Ichinose T, He M, Song Y, Yoshida Y, Yoshida S, et al. Enhancement of OVA-induced murine lung eosinophilia by co-exposure to contamination levels of LPS in Asian sand dust and heated dust. *Allergy, asthma, and clinical immunology : official journal of the Canadian Society of Allergy and Clinical Immunology*. 2014;10(1):30.

Renner HW. The question of a combined effect of a chemical mutagen and radiation sterilized feed in mutagenicity and reproduction tests in the mouse. *Food and cosmetics toxicology*. 1975;13(4):427-31.

Renwick A. Combination toxicology and interactions of additives. *Voprosy pitaniia*. 2000;69(3):32-7.

Renwick A. Compounds sharing the same mechanisms of action: combination toxicology. *Voprosy pitaniia*. 2002;71(1):21-8.

Requile M, Alvarez DOG, Delanaud S, Rhazi L, Bach V, Depeint F, et al. Study of the Impact of a Chronic Co-exposure of a Pesticide and a Prebiotic on the Intestinal Microbiota Using Two in Vitro Models. *Journal of Clinical Gastroenterology*. 2018;52:S106-S.

Revel M, Fournier M, Robidoux PY. Immunotoxicity and genotoxicity of single-walled carbon nanotubes co-exposed with cadmium in the freshwater mussel, *Elliptio complanata*. *Environmental Toxicology and Pharmacology*. 2018;62:177-80.

Revsikoi IK, Davydov OV, Zherdev GM. Reaction of the sound analyzer to combined exposure to noise, elevated temperature and carbon monoxide. *Vestnik otorinolaringologii*. 1984(4):14-7.

Reyes JM, Price PS. Temporal Trends in Exposures to Six Phthalates from Biomonitoring Data: Implications for Cumulative Risk. *Environmental Science & Technology*. 2018;52(21):12475-83.

Reynders H, Van Campenhout K, Bervoets L, De Coen WM, Blust R. Dynamics of cadmium accumulation and effects in common carp (*Cyprinus carpio*) during simultaneous exposure to water and food (*Tubifex tubifex*). *Environmental toxicology and chemistry*. 2006;25(6):1558-67.

Rezvaia SP, Khanson KP. Postradiation DNA repair in mammalian cells in combined exposure to hyperthermia, 8-bromocaffeine and actinomycin D. *Radiobiologiya*. 1981;21(3):326-9.

Riabichenko EV, Shcheglovitova ON, Bondarenko VM, Ezechuk IV. The production of inflammation mediators by mouse peritoneal cells under conditions of combined exposure to staphylococcal enterotoxin and lipopolysaccharide. *Zhurnal mikrobiologii, epidemiologii, i immunobiologii*. 1999(6):21-4.

Ribeiro F, Ferreira NCG, Ferreira A, Soares AMVM, Loureiro S. Is ultraviolet radiation a synergistic stressor in combined exposures? The case study of *Daphnia magna* exposure to UV and carbendazim. *Aquatic toxicology* (Amsterdam, Netherlands). 2011;102(1-2):114-22.

Ribeiro-Carvalho A, Lima CS, Medeiros AH, Siqueira NR, Filgueiras CC, Manhaes AC, et al. Combined exposure to nicotine and ethanol in adolescent mice: effects on the central cholinergic systems during short and long term withdrawal. *Neuroscience*. 2009;162(4):1174-86.

Rice MM, Ezzat L, Burkepile DE. Corallivory in the Anthropocene: Interactive Effects of Anthropogenic Stressors and Corallivory on Coral Reefs. *Frontiers in Marine Science*. 2019;5.

Richter J, Meister A, Bluethner R, Seidel H. Subjective evaluation of isolated and combined exposure to whole-body vibration and noise by means of cross-modality matching. *Activitas nervosa superior*. 1988;30(1):47-51.

Richter M, Escher BI. Mixture toxicity of reactive chemicals by using two bacterial growth assays as indicators of protein and DNA damage. *Environmental science & technology*. 2005;39(22):8753-61.

Rico A, Arenas-Sanchez A, Pasqualini J, Garcia-Astillero A, Cherta L, Nozal L, et al. Effects of imidacloprid and a neonicotinoid mixture on aquatic invertebrate communities under Mediterranean conditions. *Aquatic Toxicology*. 2018;204:130-43.

Ritchie HE, Telenius C, Gustaffson E, Webster WS. The effects of nifedipine and ivabradine on the functionality of the early rat embryonic heart. Are these drugs a risk in early human pregnancy? *Birth Defects Research*. 2019;111(5):281-8.

Riva F, Zuccato E, Davoli E, Fattore E, Castiglioni S. Risk assessment of a mixture of emerging contaminants in surface water in a highly urbanized area in Italy. *Journal of Hazardous Materials*. 2019;361:103-10.

Rivest EB, Kelly MW, DeBiasse MB, Hofmann GE. Host and Symbionts in *Pocillopora damicornis* Larvae Display Different Transcriptomic Responses to Ocean Acidification and Warming. *Frontiers in Marine Science*. 2018;5.

Roach W, Thomas R, Buffington G, Polhamus G, Notabartolo J, DiCarlo C, et al. Simultaneous Exposure Using 532 and 860 nm lasers for visible lesion thresholds in the rhesus retina. *Health physics*. 2006;90(3):241-9.

Robertson JM, Koval JJ. Co-carcinogenic effect of carbon black ingestion with dietary fat on the development of colon tumor in rats. *Toxicology letters*. 1989;48(3):317-20.

Rocco L, Santonastaso M, Nigro M, Mottola F, Costagliola D, Bernardeschi M, et al. Genomic and chromosomal damage in the marine mussel *Mytilus galloprovincialis*: Effects of the combined exposure to titanium dioxide nanoparticles and cadmium chloride. *Marine environmental research*. 2015;111:144-8.

Rocco ML, Balzamino BO, Esposito G, Petrella C, Aloe L, Micera A. NGF/anti-VEGF combined exposure protects RCS retinal cells and photoreceptors that underwent a local worsening of inflammation. *Graefe's archive for clinical and experimental ophthalmology = Albrecht von Graefes Archiv fur klinische und experimentelle Ophthalmologie*. 2017;255(3):567-74.

Rocha O, Neto AJG, Lima JCD, Freitas EC, Miguel M, Mansano AD, et al. Sensitivities of three tropical indigenous freshwater invertebrates to single and

mixture exposures of diuron and carbofuran and their commercial formulations. *Ecotoxicology*. 2018;27(7):834-44.

Roche RD, Pagano L, Majumdar S, Eitzer BD, Zuverza-Mena N, Ma CX, et al. Co-exposure of imidacloprid and nanoparticle Ag or CeO₂ to *Cucurbita pepo* (zucchini): Contaminant bioaccumulation and translocation. *Nanoimpact*. 2018;11:136-45.

Rodgers EM, Todgham AE, Connon RE, Fangue NA. Stressor interactions in freshwater habitats: Effects of cold water exposure and food limitation on early-life growth and upper thermal tolerance in white sturgeon, *Acipenser transmontanus*. *Freshwater Biology*. 2019;64(2):348-58.

Rodgers KJ, Main BJ, Samardzic K. Cyanobacterial Neurotoxins: Their Occurrence and Mechanisms of Toxicity. *Neurotoxicity Research*. 2018;33(1):168-77.

Rodgers ML, Jones ER, Klinkhamer C, Mahapatra CT, Serafin J, Bosker T, et al. Combined effects of Deepwater Horizon crude oil and environmental stressors on *Fundulus grandis* embryos. *Environmental Toxicology and Chemistry*. 2018;37(7):1916-25.

Rodrigues ACM, Bordalo MD, Golovko O, Koba O, Barata C, Soares A, et al. Combined effects of insecticide exposure and predation risk on freshwater detritivores. *Ecotoxicology*. 2018;27(7):794-802.

Rodrigues ACM, Bordalo MD, Golovko O, Koba O, Barata C, Soares AMVM, et al. Combined effects of insecticide exposure and predation risk on freshwater detritivores. *Ecotoxicology (London, England)*. 2018.

Rodrigues ACM, Machado AL, Bordalo MD, Saro L, Simao FCP, Rocha RJM, et al. Invasive Species Mediate Insecticide Effects on Community and Ecosystem Functioning. *Environmental Science & Technology*. 2018;52(8):4889-900.

Rok J, Wrzesniok D, Beberok A, Otreba M, Delijewski M, Buszman E. Phototoxic effect of oxytetracycline on normal human melanocytes. *Toxicology in Vitro*. 2018;48:26-32.

Ronne M. Fluorouracil synchronization of human bone marrow cultures. In vitro induction of high resolution R-banding by simultaneous exposure to 5-bromodeoxyuridine/Hoechst 33258. *Anticancer research*. 1984;4(4-5):279-81.

Rosal R, Rodea-Palomares I, Boltes K, Fernandez-Pinas F, Leganes F, Petre A. Ecotoxicological assessment of surfactants in the aquatic environment:

combined toxicity of docusate sodium with chlorinated pollutants. *Chemosphere*. 2010;81(2):288-93.

Rose S, Altenburger R, Sturm A. Mixture toxicity effects of sea louse control agents in *Daphnia magna*. *Chemosphere*. 2016;144:599-606.

Rosenzweig BR, McPhillips L, Chang H, Cheng CW, Welty C, Matsler M, et al. Pluvial flood risk and opportunities for resilience. *Wiley Interdisciplinary Reviews-Water*. 2018;5(6).

Roshan S, DeVries T, Wu JF, Chen GD. The Internal Cycling of Zinc in the Ocean. *Global Biogeochemical Cycles*. 2018;32(12):1833-49.

Roshanizarmehri M, Fotovat A, Emami H, Kehl M, Hirmas DR, Hosseinalizadeh M, et al. Combined effects of polyacrylamide and nanomagnetite amendment on soil and water quality, Khorasan Razavi, Iran. *Journal of Environmental Management*. 2018;223:703-12.

Roszkó ML, Kaminska M, Szymczyk K, Piasecka-Jozwiak K, Chablowska B. Endocrine disrupting potency of organic pollutant mixtures isolated from commercial fish oil evaluated in yeast-based bioassays. *Plos One*. 2018;13(5).

Rothenberg SE, Jackson BP, Carly McCalla G, Donohue A, Emmons AM. Co-exposure to methylmercury and inorganic arsenic in baby rice cereals and rice-containing teething biscuits. *Environmental research*. 2017;159:639-47.

Rotimi OA, Rotimi SO, Oluwafemi F, Ademuyiwa O, Balogun EA. Oxidative Stress in Extrahepatic Tissues of Rats Co-Exposed to Aflatoxin B1 and Low Protein Diet. *Toxicological Research*. 2018;34(3):211-20.

Rotter S, Beronius A, Boobis AR, Hanberg A, van Klaveren J, Luijten M, et al. Overview on legislation and scientific approaches for risk assessment of combined exposure to multiple chemicals: the potential EuroMix contribution. *Critical Reviews in Toxicology*. 2018;48(9):796-814.

Roux E, Duvert M, Marthan R. Combined effect of chronic hypoxia and in vitro exposure to gas pollutants on airway reactivity. *American journal of physiology Lung cellular and molecular physiology*. 2002;283(3):L628-35.

Roy U, Bulot C, Honer zu Bentrup K, Mondal D. Specific increase in MDR1 mediated drug-efflux in human brain endothelial cells following co-exposure to HIV-1 and saquinavir. *PloS one*. 2013;8(10):e75374.

Ru XJ, Wang SY, Yan S. Exploring the effects of normative factors and perceived behavioral control on individual's energy-saving intention: An empirical study in eastern China. *Resources Conservation and Recycling*. 2018;134:91-9.

Ruan CC. The co-mutagenic effect of metabolic extracts of fungi grown on the main grain in high incidence liver cancer areas--Fusui County. *Zhonghua yu fang yi xue za zhi* [Chinese journal of preventive medicine]. 1991;25(5):288-91.

Ruchirawat M, Navasumrit P, Settachan D. Exposure to benzene in various susceptible populations: co-exposures to 1,3-butadiene and PAHs and implications for carcinogenic risk. *Chemico-biological interactions*. 2010;184(1-2):67-76.

Ruckert C, Weger-Lucarelli J, Garcia-Luna SM, Young MC, Byas AD, Murrieta RA, et al. Impact of simultaneous exposure to arboviruses on infection and transmission by *Aedes aegypti* mosquitoes. *Nature communications*. 2017;8:15412.

Rudnicki T. Combined effect of long-term and acute exposure to ionizing radiation on the proliferation of bone marrow cells in mice. *Polski przeglad radiologii*. 1985;49(3):174-7.

Rumiantsev GI, Novikov SM. Assessment of the nature of combined effects of harmful substances with regard to their cumulative characteristics. *Gigiena i sanitarii*. 1992(1):49-51.

Ruppe K, Enderlein G, Ruppe I, Wulke P. Combined effect of simultaneously occurring environmental industrial factors on the health status of exposed workers. *Zeitschrift fur die gesamte Hygiene und ihre Grenzgebiete*. 1987;33(7):349-52.

Ryan DA, Hubert JJ, Carter EM, Sprague JB, Parrott J. A reduced-rank multivariate regression approach to aquatic joint toxicity experiments. *Biometrics*. 1992;48(1):155-62.

Rydzynski K, Korsak Z, Jedlinska U, Sokal JA. The toxic effects of combined exposure to toluene and m-xylene in animals. IV. Liver ultrastructure after subchronic inhalatory exposure. *Polish journal of occupational medicine and environmental health*. 1992;5(1):35-42.

Rylander R, Sjostrand M, Bergstrom R. Free lung cell response after combined exposure to cigarette smoke and industrial dusts. *Toxicology*. 1979;12(3):211-20.

Sadakane K, Ichinose T, Nishikawa M, Takano H, Shibamoto T. Co-exposure to zymosan A and heat-inactivated Asian sand dust exacerbates ovalbumin-induced murine lung eosinophilia. *Allergy, asthma, and clinical immunology : official journal of the Canadian Society of Allergy and Clinical Immunology*. 2016;12:48.

Sadakane K, Ichinose T, Nishikawa M. Effects of co-exposure of lipopolysaccharide and beta-glucan (Zymosan A) in exacerbating murine allergic asthma associated with Asian sand dust. *Journal of Applied Toxicology*. 2019;39(4):672-84.

Saddiq B, Ejaz M, Shad SA, Aslam M. Assessing the combined toxicity of conventional and newer insecticides on the cotton mealybug *Phenacoccus solenopsis*. *Ecotoxicology (London, England)*. 2017;26(9):1240-9.

Saito H, Kato M, Yoshida A, Naito M. The ingestion of a fructose-containing beverage combined with fat cream exacerbates postprandial lipidemia in young healthy women. *Journal of atherosclerosis and thrombosis*. 2015;22(1):85-94.

Saito H, Kato M, Yoshida A, Naito M. The Ingestion of a Fructose-Containing Beverage Combined with Fat Cream Exacerbates Postprandial Lipidemia in Young Healthy Women. *Journal of atherosclerosis and thrombosis*. 2015;22(6):645.

Sak K, Lust H, Kase M, Saar M, Jaal J. Suppression of Taxanes Cytotoxicity by Citrus Flavonoid Hesperetin in PPC-1 Human Prostate Cancer Cells. *Anticancer Research*. 2018;38(11):6209-15.

Salam MMA, Mohsin M, Pulkkinen P, Pelkonen P, Pappinen A. Effects of soil amendments on the growth response and phytoextraction capability of a willow variety (*S. viminalis* x *S. schwerinii* x *S. dasyclados*) grown in contaminated soils. *Ecotoxicology and Environmental Safety*. 2019;171:753-70.

Saleem S, Dyck R, Hu GJ, Hewage K, Rodriguez M, Sadiq R. Investigating the effects of design and management factors on DBPs levels in indoor aquatic centres. *Science of the Total Environment*. 2019;651:775-86.

Saleem U, Ejaz S, Ashraf M, Omer MO, Altaf I, Batool Z, et al. Mutagenic and cytotoxic potential of Endosulfan and Lambda-cyhalothrin - in vitro study describing individual and combined effects of pesticides. *Journal of environmental sciences (China)*. 2014;26(7):1471-9.

Salnikow K, Li X, Lippmann M. Effect of nickel and iron co-exposure on human lung cells. *Toxicology and applied pharmacology*. 2004;196(2):258-65.

Salo T, Rasanen K, Stamm C, Burdon FJ, Seppala O. Simultaneous exposure to a pulsed and a prolonged anthropogenic stressor can alter consumer multifunctionality. *Oikos*. 2018;127(10):1437-48.

Salovsky P, Shopova V. Synergic lung changes in rats receiving combined exposure to paraquat and ionizing radiation. *Environmental research*. 1993;60(1):44-54.

Salvadego D, Keramidas ME, Brocca L, Domenis R, Mavelli I, Rittweger J, et al. Separate and combined effects of a 10-d exposure to hypoxia and inactivity on oxidative function in vivo and mitochondrial respiration ex vivo in humans. *Journal of applied physiology* (Bethesda, Md : 1985). 2016;121(1):154-63.

Salyamon LS. The role of inflammation in the mechanism of carcinogenic, co-carcinogenic and certain anti-carcinogenic effects. *Problems of oncology Voprosy onkologii*. 1961;7(5):44-50.

Sanches ALM, Vieira BH, Reghini MV, Moreira RA, Freitas EC, Espindola ELG, et al. Single and mixture toxicity of abamectin and difenoconazole to adult zebrafish (*Danio rerio*). *Chemosphere*. 2017;188:582-7.

Sanchez DJ, Belles M, Albina ML, Sirvent JJ, Domingo JL. Nephrotoxicity of simultaneous exposure to mercury and uranium in comparison to individual effects of these metals in rats. *Biological trace element research*. 2001;84(1-3):139-54.

Sanders-DeMott R, Sorensen PO, Reinmann AB, Templer PH. Growing season warming and winter freeze-thaw cycles reduce root nitrogen uptake capacity and increase soil solution nitrogen in a northern forest ecosystem. *Biogeochemistry*. 2018;137(3):337-49.

Sanderson K. POLLUTION Protocol eases search for mixture toxicity data. *Chemical & Engineering News*. 2018;96(34):15-.

Sankar MS, Dash P, Singh S, Lu YH, Mercer AE, Chen S. Effect of photobiodegradation and biodegradation on the biogeochemical cycling of dissolved organic matter across diverse surface water bodies. *Journal of Environmental Sciences-China*. 2019;77:130-47.

Sannino A, Di Costanzo G, Brescia F, Sarti M, Zeni O, Juutilainen J, et al. Human fibroblasts and 900 MHz radiofrequency radiation: evaluation of DNA damage after exposure and co-exposure to 3-chloro-4-(dichloromethyl)-5-hydroxy-2(5h)-furanone (MX). *Radiation research*. 2009;171(6):743-51.

Sano H, Matsunobu S, Abe T, Terashima Y. Combined effects of diet and cold exposure on insulin responsiveness to glucose and tissue responsiveness to insulin in sheep. *Journal of animal science*. 1992;70(11):3514-20.

Sarapultseva EI, Ustenko K, Dubrova YE. The combined effects of acute irradiation and food supply on survival and fertility in *Daphnia magna*. *Journal of Environmental Radioactivity*. 2019;199:75-83.

Sardari PT, Rahimzadeh H, Ahmadi G, Giddings D. Nano-particle deposition in the presence of electric field. *Journal of Aerosol Science*. 2018;126:169-79.

Saric M, Piasek M. Environmental exposure to manganese and combined exposure to gaseous upper respiratory irritants: mechanism of action and adverse health effects. *Reviews on environmental health*. 2000;15(4):413-9.

Sarigiannis D, Papaioannou N, Kapretsos N, Gabriel C, Distel E, de Oliveira E, et al. Multi-omics Analysis reveals that co-exposure to phthalates and metals disturbs urea cycle and choline metabolism. *Toxicology Letters*. 2018;295:S136-S.

Saritha S, Davuljigari CB, Kumar KP, Reddy GR. Effects of combined arsenic and lead exposure on the brain monoaminergic system and behavioral functions in rats: Reversal effect of MiADMSA. *Toxicology and Industrial Health*. 2019;35(2):89-108.

Savchenkov MF, Lemeshevskaja EP, Katul'skii IN, Benemanskii VV, Zhukova EV, Pogorelova IG, et al. Combined effects caused by chronic exposure to vinyl chloride and dichloroethane. *Meditcina truda i promyshlennaia ekologiia*. 2001(1):23-6.

Sayen S, Rocha C, Silva C, Vulliet E, Guillon E, Almeida CMR. Enrofloxacin and copper plant uptake by *Phragmites australis* from a liquid digestate: Single versus combined application. *Science of the Total Environment*. 2019;664:188-202.

Schaal N, Slagley J, Zreiqat M, Paschold H. Effects of combined exposure to metals, solvents, and noise on permanent threshold shifts. *American journal of industrial medicine*. 2017;60(3):227-38.

Schaal NC, Slagley JM, Richburg CM, Zreiqat MM, Paschold HW. Chemical-Induced Hearing Loss in Shipyard Workers. *Journal of Occupational and Environmental Medicine*. 2018;60(1):E55-E62.

Schantz M, Sheley R, Hardegree S. Restoring Perennial Grasses in Medusahead Habitat: Role of Tilling, Fire, Herbicides, and Seeding Rate. *Rangeland Ecology & Management*. 2019;72(2):249-59.

Schell T, Goedkoop W, Zubrod JP, Feckler A, Luderwald S, Schulz R, et al. Assessing the effects of field-relevant pesticide mixtures for their compliance with

the concentration addition model - An experimental approach with *Daphnia magna*. *Science of the Total Environment*. 2018;644:342-9.

Schetingner MRC, Peres TV, Arantes LP, Carvalho F, Dressler V, Heidrich G, et al. Combined exposure to methylmercury and manganese during L1 larval stage causes motor dysfunction, cholinergic and monoaminergic up-regulation and oxidative stress in L4 *Caenorhabditis elegans*. *Toxicology*. 2019;411:154-62.

Schleier JJ, Peterson RKD. The joint toxicity of type I, II, and nonester pyrethroid insecticides. *Journal of economic entomology*. 2012;105(1):85-91.

Schlotz N, Roulin A, Ebert D, Martin-Creuzburg D. Combined effects of dietary polyunsaturated fatty acids and parasite exposure on eicosanoid-related gene expression in an invertebrate model. *Comparative biochemistry and physiology Part A, Molecular & integrative physiology*. 2016;201:115-23.

Schmidt S, Busch W, Altenburger R, Kuster E. Mixture toxicity of water contaminants-effect analysis using the zebrafish embryo assay (*Danio rerio*). *Chemosphere*. 2016;152:503-12.

Schmidt SN, Holmstrup M, Smith KEC, Mayer P. Passive dosing of polycyclic aromatic hydrocarbon (PAH) mixtures to terrestrial springtails: linking mixture toxicity to chemical activities, equilibrium lipid concentrations, and toxic units. *Environmental science & technology*. 2013;47(13):7020-7.

Schneider S, Fussell KC, Melching-Kollmuss S, Buesen R, Groters S, Strauss V, et al. Investigations on the dose-response relationship of combined exposure to low doses of three anti-androgens in Wistar rats. *Archives of toxicology*. 2017.

Schnell S, Bols NC, Barata C, Porte C. Single and combined toxicity of pharmaceuticals and personal care products (PPCPs) on the rainbow trout liver cell line RTL-W1. *Aquatic toxicology (Amsterdam, Netherlands)*. 2009;93(4):244-52.

Schoen ED. Statistical designs in combination toxicology: a matter of choice. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 1996;34(11-12):1059-65.

Schoen H, Magnus H. Homogenization of unequally darkened roentgenograms; comment on W. Buchholz work: on simultaneous exposure of roentgenograms by means of equalizing foils. *Fortschritte auf dem Gebiete der Rontgenstrahlen*. 1953;79(2):241-4.

Schuler LJ, Landrum PF, Harwood AD, Tripp EM, Lydy MJ. Joint toxicity of fluoranthene and pentachlorobenzene to *Hyalella azteca* and *Chironomus dilutus*. *Chemosphere*. 2009;77(3):399-403.

Schuler LJ, Trimble AJ, Belden JB, Lydy MJ. Joint toxicity of triazine herbicides and organophosphate insecticides to the midge *Chironomus tentans*. *Archives of environmental contamination and toxicology*. 2005;49(2):173-7.

Schuller HM, McGavin MD, Orloff M, Riechert A, Porter B. Simultaneous exposure to nicotine and hyperoxia causes tumors in hamsters. *Laboratory investigation; a journal of technical methods and pathology*. 1995;73(3):448-56.

Schultz K, Janik H, Mohr T, Munzberger E, Stoll R. Transient shift in hearing threshold in simultaneous exposure to noise and postural activities. *Zeitschrift fur die gesamte Hygiene und ihre Grenzgebiete*. 1989;35(8):498-502.

Schulz R, Dabrowski JM. Combined effects of predatory fish and sublethal pesticide contamination on the behavior and mortality of mayfly nymphs. *Environmental toxicology and chemistry*. 2001;20(11):2537-43.

Schwarz M, Salva J, Dado M, Vanek M, Borosova D. COMBINED EXPOSURE TO NOISE AND EXHAUST FUMES DURING CHAINSAW OPERATION. *Akustika*. 2019;31:64-72.

Scott BR. Theoretical models for estimating dose-effect relationships after combined exposure to cytotoxicants. *Bulletin of mathematical biology*. 1983;45(3):323-45.

Sedov AV, Surovtsev NA, Lukicheva TA, Beliakova IP. Tactics of protection of humans in accidents associated with combined exposure to chemical and physical factors. *Medsina truda i promyshlennaia ekologiia*. 1999(12):34-7.

Segurado P, Almeida C, Neves R, Ferreira MT, Branco P. Understanding multiple stressors in a Mediterranean basin: Combined effects of land use, water scarcity and nutrient enrichment. *Science of the Total Environment*. 2018;624:1221-33.

Sehra S, Jaggi S, Sehra D, Aggarwal R, Saraswat V, Juneja D. Management of Sitagliptin and Metformin Combination Toxic Overdose. *The Journal of the Association of Physicians of India*. 2016;64(11):80-1.

Seidel H, Bluthner R, Martin J, Menzel G, Panuska R, Ullsperger P. Effects of isolated and combined exposures to whole-body vibration and noise on auditory-event related brain potentials and psychophysical assessment. *European journal of applied physiology and occupational physiology*. 1992;65(4):376-82.

Seidel H, Harazin B, Pavlas K, Sroka C, Richter J, Bluthner R, et al. Isolated and combined effects of prolonged exposures to noise and whole-body vibration on hearing, vision and strain. *International archives of occupational and environmental health*. 1988;61(1-2):95-106.

Seidelin M, Brauner CJ, Jensen FB, Madsen SS. Vacuolar-type H(+)-ATPase and Na⁺, K(+)-ATPase expression in gills of Atlantic salmon (*Salmo salar*) during isolated and combined exposure to hyperoxia and hypercapnia in fresh water. *Zoological science*. 2001;18(9):1199-205.

Seiji K, Inoue O, Jin C, Liu YT, Cai SX, Ohashi M, et al. Dose-excretion relationship in tetrachloroethylene-exposed workers and the effect of tetrachloroethylene co-exposure on trichloroethylene metabolism. *American journal of industrial medicine*. 1989;16(6):675-84.

Sejbaek CS, Bay H, Larsen AD, Kristensen P, Schlunssen V, Andersen AMN, et al. Combined exposure to lifting and psychosocial strain at work and adverse pregnancy outcomes-A study in the Danish National Birth Cohort. *Plos One*. 2018;13(9).

Sengor SS, Gikas P, Moberly JG. Single and joint effects of Zn and Cu to ATP pool and microbial recovery in continuous growth systems. *Journal of Chemical Technology and Biotechnology*. 2019;94(3):892-9.

Sengupta S, Khatua C, Balla VK. In Vitro Carcinoma Treatment Using Magnetic Nanocarriers under Ultrasound and Magnetic Fields. *Acs Omega*. 2018;3(5):5459-69.

Seo JY, Ko YH, Ma SX, Lee BR, Lee SY, Jang CG. Repeated restraint stress reduces the acquisition and relapse of methamphetamine-conditioned place preference but not behavioral sensitization. *Brain Research Bulletin*. 2018;139:99-104.

Setala K, Holsti P, Lundbom S. Criteria for the evaluation of canceration dangers; co-carcinogenic action. *Acta - Unio Internationalis Contra Cancrum*. 1957;13(2):280-9.

Seuntjens D, Van Tendeloo M, Chatzigiannidou I, Carvajal-Arroyo JM, Vandendriessche S, Vlaeminck SE, et al. Synergistic Exposure of Return-Sludge to Anaerobic Starvation, Sulfide, and Free Ammonia to Suppress Nitrite Oxidizing Bacteria. *Environmental Science & Technology*. 2018;52(15):8725-32.

Sgolastra F, Arnan X, Cabbri R, Isani G, Medrzycki P, Teper D, et al. Combined exposure to sublethal concentrations of an insecticide and a fungicide

affect feeding, ovary development and longevity in a solitary bee. *Proceedings of the Royal Society B-Biological Sciences*. 2018;285(1885).

Shafirkin AV, Mukhamedieva LN, Tatarkin SV, Barantseva MI. Evaluation of the risk of delayed adverse effects of chronic combined exposure to radiation and chemical factors with the purpose to ensure safety in orbital and exploration space missions. *Aviakosmicheskaja i ekologicheskaja meditsina = Aerospace and environmental medicine*. 2012;46(1):23-9.

Shan LS, Zhao WZ, Li Y, Zhang ZZ, Xie TT. Precipitation amount and frequency affect seedling emergence and growth of *Reaumuria soongarica* in northwestern China. *Journal of Arid Land*. 2018;10(4):574-87.

Shan Q, Huang F, Wang J, Du Y. Effects of co-exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin and polychlorinated biphenyls on nonalcoholic fatty liver disease in mice. *Environmental toxicology*. 2015;30(12):1364-74.

Shan Y, Lin J, Xu P, Zeng M, Lin H, Yan H. The combined effect of hypertension and type 2 diabetes mellitus on aortic stiffness and endothelial dysfunction: an integrated study with high-resolution MRI. *Magnetic resonance imaging*. 2014;32(3):211-6.

Shane HL, Lukomska E, Anderson SE. Co-exposure to antimicrobial chemicals augments IgE mediated immune responses. *Journal of Allergy and Clinical Immunology*. 2018;141(2):AB199-AB.

Shang Y, Jiang Y-T, Zhang L, Li Y. Combined effects of 1-nitropyrene and 1,2-naphthoquinone on cytotoxicity and DNA damage in A549 cells. *Huan jing ke xue= Huanjing kexue*. 2014;35(11):4345-51.

Shanmugarajan S, Zhang Y, Moreno-Villanueva M, Clanton R, Rohde LH, Ramesh GT, et al. Combined Effects of Simulated Microgravity and Radiation Exposure on Osteoclast Cell Fusion. *International journal of molecular sciences*. 2017;18(11).

Shao Y, Chen ZL, Hollert H, Zhou SB, Deutschmann B, Seiler TB. Toxicity of 10 organic micropollutants and their mixture: Implications for aquatic risk assessment. *Science of the Total Environment*. 2019;666:1273-82.

Sharma R, Ahuja M, Panda NK, Khullar M. Combined effect of smoking and polymorphisms in tobacco carcinogen-metabolizing enzymes CYP1A1 and GSTM1 on the head and neck cancer risk in North Indians. *DNA and cell biology*. 2010;29(8):441-8.

Shaw PJ, Ganey PE, Roth RA. Tumor necrosis factor alpha is a proximal mediator of synergistic hepatotoxicity from trovafloxacin/lipopolysaccharide coexposure. *The Journal of pharmacology and experimental therapeutics*. 2009;328(1):62-8.

Sheerin NS, Monk PN, Aslam M, Thurston H. Simultaneous exposure to lead, arsenic and mercury from Indian ethnic remedies. *The British journal of clinical practice*. 1994;48(6):332-3.

Sheikh M, Poustchi H, Pourshams A, Etemadi A, Islami F, Khoshnia M, et al. Individual and Combined Effects of Environmental Risk Factors for Esophageal Cancer Based on Results From the Golestan Cohort Study. *Gastroenterology*. 2019;156(5):1416-27.

Shen P, Xi Y-L, Zhang Y, Zhou B, Wang M. Combined toxicity of copper and cadmium to cladoceran *Moina marocopa*. *Ying yong sheng tai xue bao = The journal of applied ecology*. 2012;23(10):2855-62.

Shen XX, Li RL, Chai MW, Cheng SS, Niu ZY, Qiu GY. Interactive effects of single, binary and trinary trace metals (lead, zinc and copper) on the physiological responses of *Kandelia obovata* seedlings. *Environmental Geochemistry and Health*. 2019;41(1):135-48.

Shibata E, Huang J, Ono Y, Hisanaga N, Iwata M, Saito I, et al. Changes in urinary n-hexane metabolites by co-exposure to various concentrations of methyl ethyl ketone and fixed n-hexane levels. *Archives of toxicology*. 1990;64(2):165-8.

Shibata E, Johanson G, Lof A, Ernstgard L, Gullstrand E, Sigvardsson K. Changes in n-hexane toxicokinetics in short-term single exposure due to co-exposure to methyl ethyl ketone in volunteers. *International archives of occupational and environmental health*. 2002;75(6):399-405.

Shibuya N, Ohta T, Sakai H, Takagi S, Magara J, Yamamoto M. Co-mutagenic activity of phenoxyherbicides MCPA- and MCPB-ethylester in the Ames assay. *The Tohoku journal of experimental medicine*. 1990;160(2):167-8.

Shields PG, McCunney RJ, Chase KH. Confined space hazards: combined exposure to styrene, fiberglass, and silica. *Journal of occupational and environmental medicine*. 1995;37(2):185-8.

Shin J, Cho KH, Choi Y, Lee SG, Park EC, Jang SI. Combined effect of individual and neighborhood socioeconomic status on mortality in patients with newly diagnosed dyslipidemia: A nationwide Korean cohort study from 2002 to

2013. Nutrition, metabolism, and cardiovascular diseases : NMCD. 2016;26(3):207-15.

Shinpo K, Kikuchi S, Sasaki H, Moriwaka F, Tashiro K. Effect of 1,25-dihydroxyvitamin D(3) on cultured mesencephalic dopaminergic neurons to the combined toxicity caused by L-buthionine sulfoximine and 1-methyl-4-phenylpyridine. *Journal of neuroscience research*. 2000;62(3):374-82.

Shirakawa T, Kusaka Y, Morimoto K. Combined effect of smoking habits and occupational exposure to hard metal on total IgE antibodies. *Chest*. 1992;101(6):1569-76.

Shrestha NK, Thomas BW, Du XZ, Hao XY, Wang JY. Modeling nitrous oxide emissions from rough fescue grassland soils subjected to long-term grazing of different intensities using the Soil and Water Assessment Tool (SWAT). *Environmental Science and Pollution Research*. 2018;25(27):27362-77.

Shtenberg AI, Torchinskii AM. Evaluation of experimental data on teratogenic properties of substances foreign to the body in their combined effect. *Gigiena i sanitariia*. 1976(12):32-5.

Shubik VM, Zykova IA. Immunological changes in combined exposure to chronic gamma irradiation in small doses and to toxic substances. *Meditinskaia radiologiya*. 1981;26(9):44-8.

Shukla S, Jhamtani RC, Dahiya MS, Agarwal R. Oxidative injury caused by individual and combined exposure of neonicotinoid, organophosphate and herbicide in zebrafish. *Toxicology reports*. 2017;4:240-4.

Shukla Y, Baqar SM, Mehrotra NK. Carcinogenic and co-carcinogenic studies of thiram on mouse skin. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 1996;34(3):283-9.

Shukla Y, Singh A, Mehrotra NK. Evaluation of carcinogenic and co-carcinogenic potential Quinalphos in mouse skin. *Cancer letters*. 2000;148(1):1-7.

Siddiqui MA, Kashyap MP, Al-Khedhairi AA, Musarrat J, Khanna VK, Yadav S, et al. Protective potential of 17beta-estradiol against co-exposure of 4-hydroxynonenal and 6-hydroxydopamine in PC12 cells. *Human & experimental toxicology*. 2011;30(8):860-9.

Sidorkiewicz I, Czerniecki J, Jarzabek K, Zbucka-Kretowska M, Wolczynski S. Cellular, transcriptomic and methylome effects of individual and combined

exposure to BPA, BPF, BPS on mouse spermatocyte GC-2 cell line. *Toxicology and Applied Pharmacology*. 2018;359:1-11.

Sidorov VF, Pershin SB, Frenkel ID, Bobkova AS, Korovkina EG. The immunological and hormonal effects of combined exposure to a bitemporal ultrahigh-frequency electrical field and to decimeter waves at different sites. *Voprosy kurortologii, fizioterapii, i lechebnoi fizicheskoi kultury*. 1992(2):3-7.

Silbermann M, Shurtz-Swirski R, Lewinson D, Shenzer P, Mayer H. In vitro response of neonatal condylar cartilage to simultaneous exposure to the parathyroid hormone fragments 1-34, 28-48, and 53-84 hPTH. *Calcified tissue international*. 1991;48(4):260-6.

Silins I, Hogberg J. Combined toxic exposures and human health: biomarkers of exposure and effect. *International journal of environmental research and public health*. 2011;8(3):629-47.

Silva CS, Chang C-W, Williams D, Porter-Gill P, Gamboa da Costa G, Camacho L. Effects of a 28-day dietary co-exposure to melamine and cyanuric acid on the levels of serum microRNAs in male and female Fisher 344 rats. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2016;98(Pt A):11-6.

Silva E, Martins C, Pereira AS, Loureiro S, Cerejeira MJ. Toxicity prediction and assessment of an environmentally realistic pesticide mixture to *Daphnia magna* and *Raphidocelis subcapitata*. *Ecotoxicology*. 2018;27(7):956-67.

Silva LF, Mendes R. Combined exposure to noise and vibration and its effects on workers' hearing. *Revista de saude publica*. 2005;39(1):9-17.

Silva V, Marques CR, Campos I, Vidal T, Keizer JJ, Goncalves F, et al. Combined effect of copper sulfate and water temperature on key freshwater trophic levels - Approaching potential climatic change scenarios. *Ecotoxicology and Environmental Safety*. 2018;148:384-92.

Silva Y, Ribeiro BR, Brum FT, Soares B, Loyola R, Michalski F. Combined exposure to hydroelectric expansion, climate change and forest loss jeopardies amphibians in the Brazilian Amazon. *Diversity and Distributions*. 2018;24(8):1072-82.

Silverman SJ, Andrews AW. Bile acids: co-mutagenic activity in the *Salmonella*-mammalian-microsome mutagenicity test: brief communication. *Journal of the National Cancer Institute*. 1977;59(5):1557-9.

Simmons JE. Application of physiologically based pharmacokinetic modelling to combination toxicology. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 1996;34(11-12):1067-73.

Sinczuk-Walczak H, Szymczak M, Aniolczyk H, Brzezinski S, Razniewska G, Trzcinka-Ochocka M, et al. The effect of combined exposure to chemical and physical factors on the nervous system during aluminum production: a preliminary finding. *Medycyna pracy*. 2006;57(1):7-13.

Singh KP, Lopez-Guerrero JA, Llombart-Bosch A, Roy D. Age, sex and co-exposure to N-ethyl-N-nitrosourea influence mutations in the Alu repeat sequences in diethylstilbestrol-induced kidney tumors in Syrian hamsters. *Mutagenesis*. 2004;19(1):67-73.

Singh MP, Ram KR, Mishra M, Shrivastava M, Saxena DK, Chowdhuri DK. Effects of co-exposure of benzene, toluene and xylene to *Drosophila melanogaster*: alteration in hsp70, hsp60, hsp83, hsp26, ROS generation and oxidative stress markers. *Chemosphere*. 2010;79(5):577-87.

Singh ND, Sharma AK, Dwivedi P, Telang AG, Kumar M, Patil RD. Studies on apoptotic changes in combined toxicity of citrinin and endosulfan in pregnant wistar rats and their fetuses. *Toxicology international*. 2012;19(2):138-43.

Singh R, Parihar P, Prasad SM. Simultaneous exposure of sulphur and calcium hinder As toxicity: Up-regulation of growth, mineral nutrients uptake and antioxidants system. *Ecotoxicology and Environmental Safety*. 2018;161:318-31.

Sinha AK, Kapotwe M, Dabi SB, Montes CdS, Shrivastava J, Blust R, et al. Differential modulation of ammonia excretion, Rhesus glycoproteins and ion-regulation in common carp (*Cyprinus carpio*) following individual and combined exposure to waterborne copper and ammonia. *Aquatic toxicology (Amsterdam, Netherlands)*. 2016;170:129-41.

Sinkalu VO, Ayo JO. Combined effects of retinol, ascorbic acid and alphatocopherol on diurnal variations in rectal temperature of Black Harco pullets subjected to heat stress. *International Journal of Biometeorology*. 2018;62(1):9-15.

Sinyakova NA, Kulikova EA, Englevskii NA, Kulikov AV. Effects of Fluoxetine and Potential Antidepressant 8-Trifluoromethyl 1,2,3,4,5-Benzopentathiepin-6-Amine Hydrochloride (TC-2153) on Behavior of *Danio rerio* Fish in the Novel Tank Test and Brain Content of Biogenic Amines and Their Metabolites. *Bulletin of Experimental Biology and Medicine*. 2018;164(5):620-3.

Sivula L, Vehniainen ER, Karjalainen AK, Kukkonen JVK. Toxicity of biomining effluents to *Daphnia magna*: Acute toxicity and transcriptomic biomarkers. *Chemosphere*. 2018;210:304-11.

Skoczynska A, Smolik R, Milian A. The effect of combined exposure to lead and cadmium on the concentration of zinc and copper in rat tissues. *International journal of occupational medicine and environmental health*. 1994;7(1):41-9.

Skoczynska A, Smolik R. The effect of combined exposure to lead and cadmium on serum lipids and lipid peroxides level in rats. *International journal of occupational medicine and environmental health*. 1994;7(3):263-71.

Skowronska M, McDonald M, Velichkovska M, Leda AR, Park M, Toborek M. Methamphetamine increases HIV infectivity in neural progenitor cells. *Journal of Biological Chemistry*. 2018;293(1):296-311.

Slatculescu AM, Chen Y. Synergism between Female Gender and High Levels of Daily Stress Associated with Migraine Headaches in Ontario, Canada. *Neuroepidemiology*. 2018;51(3-4):183-9.

Slencu BG, Ciobanu C, Cuciureanu R, Anton A, Ciobanu S, Solcan G, et al. PROTECTIVE EFFECTS OF SELENIUM ON HEPATOTOXICITY CAUSED BY SUBACUTE EXPERIMENTAL COMBINED EXPOSURE TO CADMIUM AND LEAD IN RATS. *Farmacia*. 2018;66(5):866-76.

Sliwinska-Kowalska M, Zamyslowska-Szmytko E, Szymczak W, Kotylo P, Fiszer M, Wesolowski W, et al. Exacerbation of noise-induced hearing loss by co-exposure to workplace chemicals. *Environmental toxicology and pharmacology*. 2005;19(3):547-53.

Sliwinska-Kowalska M, Zamyslowska-Szmytko E, Szymczak W, Kotylo P, Fiszer M, Wesolowski W, et al. Ototoxic effects of occupational exposure to styrene and co-exposure to styrene and noise. *Journal of occupational and environmental medicine*. 2003;45(1):15-24.

Sloey TM, Hester MW. Impact of nitrogen and importance of silicon on mechanical stem strength in *Schoenoplectus acutus* and *Schoenoplectus californicus*: applications for restoration. *Wetlands Ecology and Management*. 2018;26(3):459-74.

Slotkin TA, Skavicus S, Ko A, Levin ED, Seidler FJ. The Developmental Neurotoxicity of Tobacco Smoke Can Be Mimicked by a Combination of Nicotine and Benzo a Pyrene: Effects on Cholinergic and Serotonergic Systems. *Toxicological Sciences*. 2019;167(1):293-304.

Slotkin TA, Skavicus S, Seidler FJ. Developmental neurotoxicity resulting from pharmacotherapy of preterm labor, modeled in vitro: Terbutaline and dexamethasone, separately and together. *Toxicology*. 2018;400:57-64.

Smith JC, Schaeffer RW. Development of water and saccharin preference after simultaneous exposures to saccharin solution and gamma rays. *Journal of comparative and physiological psychology*. 1967;63(3):434-8.

Smith MC, Gheux A, Coton M, Madec S, Hymery N, Coton E. In vitro co-culture models to evaluate acute cytotoxicity of individual and combined mycotoxin exposures on Caco-2, THP-1 and HepaRG human cell lines. *Chemico-Biological Interactions*. 2018;281:51-9.

Smith M-C, Madec S, Coton E, Hymery N. Natural Co-Occurrence of Mycotoxins in Foods and Feeds and Their in vitro Combined Toxicological Effects. *Toxins*. 2016;8(4):94.

Smith M-C, Madec S, Pawtowski A, Coton E, Hymery N. Individual and combined toxicological effects of deoxynivalenol and zearalenone on human hepatocytes in in vitro chronic exposure conditions. *Toxicology letters*. 2017;280:238-46.

Smith MC, Madec S, Troadec S, Coton E, Hymery N. Effects of fusariotoxin co-exposure on THP-1 human immune cells. *Cell Biology and Toxicology*. 2018;34(3):191-205.

Smith M-C, Madec S, Troadec S, Coton E, Hymery N. Effects of fusariotoxin co-exposure on THP-1 human immune cells. *Cell biology and toxicology*. 2018;34(3):191-205.

Smith MC, Timmins-Schiffman E, Coton M, Coton E, Hymery N, Nunn BL, et al. Differential impacts of individual and combined exposures of deoxynivalenol and zearalenone on the HepaRG human hepatic cell proteome. *Journal of Proteomics*. 2018;173:89-98.

Smith M-C, Timmins-Schiffman E, Coton M, Coton E, Hymery N, Nunn BL, et al. Differential impacts of individual and combined exposures of deoxynivalenol and zearalenone on the HepaRG human hepatic cell proteome. *Journal of proteomics*. 2018;173:89-98.

Smoliakova GP, Moiseev VP. Morphologic changes in the retina experimentally induced by noradrenaline and combined exposure to noradrenaline and light of moderate intensity. *Vestnik oftalmologii*. 1986;102(5):43-6.

Snoeijs T, Dauwe T, Pinxten R, Darras VM, Arckens L, Eens M. The combined effect of lead exposure and high or low dietary calcium on health and immunocompetence in the zebra finch (*Taeniopygia guttata*). *Environmental pollution (Barking, Essex : 1987)*. 2005;134(1):123-32.

Snyder M, Turrentine JE, Cruz PD. Photocontact Dermatitis and Its Clinical Mimics: an Overview for the Allergist. *Clinical Reviews in Allergy & Immunology*. 2019;56(1):32-40.

Sobolewski M, Conrad K, Marvin E, Allen JL, Cory-Slechta DA. Endocrine active metals, prenatal stress and enhanced neurobehavioral disruption. *Hormones and Behavior*. 2018;101:36-49.

Sofyan A, Price DJ, Birge WJ. Effects of aqueous, dietary and combined exposures of cadmium to *Ceriodaphnia dubia*. *The Science of the total environment*. 2007;385(1-3):108-16.

Sokal JA, Korsak Z. The additivity rule in the evaluation of health effects of combined exposure to solvents--does it hold? *Polish journal of occupational medicine*. 1990;3(3):333-6.

Sokolov EI, Zaev AP, Khovanskaia TP, Velichkina SV, Zhizhina SA, Morozova TP. The hormonal reaction of the healthy subject to combined exposure to the insulin test and physical loading. *Fiziologiya cheloveka*. 1990;16(4):130-4.

Soleimani E, Goudarzi I, Abrari K, Lashkarbolouki T. Maternal administration of melatonin prevents spatial learning and memory deficits induced by developmental ethanol and lead co-exposure. *Physiology & behavior*. 2017;173:200-8.

Soleimani E, Goudarzi I, Abrari K, Lashkarbolouki T. The combined effects of developmental lead and ethanol exposure on hippocampus dependent spatial learning and memory in rats: Role of oxidative stress. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2016;96:263-72.

Solomon KR, Wilks MF, Bachman A, Boobis A, Moretto A, Pastoor TP, et al. Problem formulation for risk assessment of combined exposures to chemicals and other stressors in humans. *Critical reviews in toxicology*. 2016;46(10):835-44.

Son JY, Kang YJ, Kim KS, Kim TH, Lim SK, Lim HJ, et al. Evaluation of renal toxicity by combination exposure to melamine and cyanuric Acid in male sprague-dawley rats. *Toxicological research*. 2014;30(2):99-107.

Song J, Kang J, Lin B, Li J, Zhu Y, Du J, et al. Mediating Role of TRPV1 Ion Channels in the Co-exposure to PM2.5 and Formaldehyde of Balb/c Mice Asthma Model. *Scientific reports*. 2017;7(1):11926.

Song JK, Guo DD, Bi HS. Chlorogenic acid attenuates hydrogen peroxide-induced oxidative stress in lens epithelial cells. *International Journal of Molecular Medicine*. 2018;41(2):765-72.

Song M, Wang F, Zeng L, Yin J, Wang H, Jiang G. Co-exposure of carboxyl-functionalized single-walled carbon nanotubes and 17alpha-ethinylestradiol in cultured cells: effects on bioactivity and cytotoxicity. *Environmental science & technology*. 2014;48(23):13978-84.

Song PP, Ping LW, Gao JP, Li XX, Zhu MJ, Wang J. Ecotoxicological effects of fertilizers made from pulping waste liquor on earthworm *Eisenia fetida*. *Ecotoxicology and Environmental Safety*. 2018;166:237-41.

Song Y, Asselman J, De Schamphelaere KAC, Salbu B, Tollefsen KE. Deciphering the Combined Effects of Environmental Stressors on Gene Transcription: A Conceptual Approach. *Environmental Science & Technology*. 2018;52(9):5479-89.

Song Y-F, Luo Z, Pan Y-X, Liu X, Huang C, Chen Q-L. Effects of copper and cadmium on lipogenic metabolism and metal element composition in the javelin goby (*Synechogobius hasta*) after single and combined exposure. *Archives of environmental contamination and toxicology*. 2014;67(2):167-80.

Song YK, Hong SH, Jang M, Han GM, Jung SW, Shim WJ. Combined Effects of UV Exposure Duration and Mechanical Abrasion on Microplastic Fragmentation by Polymer Type (vol 51, pg 4368, 2017). *Environmental Science & Technology*. 2018;52(6):3831-2.

Song Z, Vijayaraghavan S, Sladek CD. Simultaneous exposure to ATP and phenylephrine induces a sustained elevation in the intracellular calcium concentration in suprachiasmatic neurons. *American journal of physiology Regulatory, integrative and comparative physiology*. 2006;291(1):R37-45.

Sonkurt M, Cig F. THE EFFECT OF PLANT GROWTH-PROMOTING BACTERIA ON THE DEVELOPMENT, YIELD AND YIELD COMPONENTS OF BREAD (TRITICUM AESTIVUM L.) AND DURUM (TRITICUM DURUM) WHEATS. *Applied Ecology and Environmental Research*. 2019;17(2):3877-96.

Sorrentino C, Roy NK, Courtenay SC, Wirgin I. Co-exposure to metals modulates CYP1A mRNA inducibility in Atlantic tomcod *Microgadus tomcod*

from two populations. *Aquatic toxicology* (Amsterdam, Netherlands). 2005;75(3):238-52.

Sosa S, Ardizzzone M, Beltramo D, Vita F, Dell'Ovo V, Barreras A, et al. Repeated oral co-exposure to yessotoxin and okadaic acid: a short term toxicity study in mice. *Toxicon : official journal of the International Society on Toxinology*. 2013;76:94-102.

Sosedova LM, Rukavishnikov VS. Risk assessment of combined exposure to environmental biological and chemical factors on man. *Gigiena i sanitariia*. 2010(5):75-9.

Soubere Mahamoud Y, Aite M, Martin C, Zhadobov M, Sauleau R, Le Drean Y, et al. Additive Effects of Millimeter Waves and 2-Deoxyglucose Co-Exposure on the Human Keratinocyte Transcriptome. *PloS one*. 2016;11(8):e0160810.

Soussi A, Gargouri M, El Feki A. Effects of co-exposure to lead and zinc on redox status, kidney variables, and histopathology in adult albino rats. *Toxicology and industrial health*. 2018;748233718770293.

Soussi A, Gargouri M, El Feki A. Effects of co-exposure to lead and zinc on redox status, kidney variables, and histopathology in adult albino rats. *Toxicology and Industrial Health*. 2018;34(7):469-80.

Souza ACF, Bastos DSS, Santos FC, Sertorio MN, Ervilha LOG, Goncalves RV, et al. Arsenic aggravates oxidative stress causing hepatic alterations and inflammation in diabetic rats. *Life Sciences*. 2018;209:472-80.

Speijers GJA, Speijers MHM. Combined toxic effects of mycotoxins. *Toxicology letters*. 2004;153(1):91-8.

Speit G, Linsenmeyer R, Duong G, Bausinger J. Investigations on potential co-mutagenic effects of formaldehyde. *Mutation research*. 2014;760:48-56.

Spliid H, Torslov J. Statistical analysis of joint toxicity in biological growth experiments. *Ecotoxicology and environmental safety*. 1994;28(2):181-92.

Sraubaev EN, Serik B. Development of technologies of population health management in Kazakhstan based on an integrated assessment of the combined exposure to environmental factors. *Gigiena i sanitariia*. 2013(5):73-5.

Srikanth K, Ahmad I, Rao JV, Trindade T, Duarte AC, Pereira E. Modulation of glutathione and its dependent enzymes in gill cells of *Anguilla anguilla* exposed to silica coated iron oxide nanoparticles with or without mercury

co-exposure under in vitro condition. Comparative biochemistry and physiology Toxicology & pharmacology : CBP. 2014;162:7-14.

Sroczyński J, Skwarna J, Rudzki H. Effect of simultaneous exposure to fluorine and manganese on health status of workers. Medycyna pracy. 1991;42(6):441-6.

Staal YCM, Meijer J, van der Kris RJC, de Bruijn AC, Boersma AY, Gremmer ER, et al. Head skeleton malformations in zebrafish (*Danio rerio*) to assess adverse effects of mixtures of compounds. Archives of Toxicology. 2018;92(12):3549-64.

Stamou M, Uwimana E, Flannery BM, Kania-Korwel I, Lehmler H-J, Lein PJ. Subacute nicotine co-exposure has no effect on 2,2',3,5',6'-pentachlorobiphenyl disposition but alters hepatic cytochrome P450 expression in the male rat. Toxicology. 2015;338:59-68.

Stankeviciute M, Sauliute G, Makaras T, Markuckas A, Virbickas T, Barsiene J. Responses of biomarkers in Atlantic salmon (*Salmo salar*) following exposure to environmentally relevant concentrations of complex metal mixture (Zn, Cu, Ni, Cr, Pb, Cd). Part II. Ecotoxicology. 2018;27(8):1069-86.

Stefanidis K, Panagopoulos Y, Mimikou M. Response of a multi-stressed Mediterranean river to future climate and socio-economic scenarios. Science of the Total Environment. 2018;627:756-69.

Stepanova LN, Chernova VV, Petrova ES, Ramazanov IS. Acoustic-Emission Testing of Failure in Samples of CFRP Exposed to Static and Heat Loads. Russian Journal of Nondestructive Testing. 2018;54(11):748-56.

Stetkiewicz J, Wronska-Nofer T, Klimczak J, Stetkiewicz I. Metabolic interaction and neurological effect of combined exposure to acrylamide and ethanol. Polish journal of occupational medicine. 1988;1(2):127-36.

Stewart PA, Stenzel MR, Ramachandran G, Banerjee S, Huynh TB, Groth CP, et al. Development of a total hydrocarbon ordinal job-exposure matrix for workers responding to the Deepwater Horizon disaster: The GuLF STUDY. Journal of Exposure Science and Environmental Epidemiology. 2018;28(3):223-30.

Stewart PW, Burright RG, Donovan PJ. DMSA chelation during co-exposure to lead: increased locomotor activity in lead-exposed mice but not controls. Physiology & behavior. 1995;57(5):863-7.

Stige LC, Ottersen G, Yaragina NA, Vikebo FB, Stenseth NC, Langangen O. Combined effects of fishing and oil spills on marine fish: Role of stock demographic structure for offspring overlap with oil. *Marine Pollution Bulletin*. 2018;129(1):336-42.

Stojak A, Bonnevie NL, Jones DS. Evaluation of metals, metalloids, and ash mixture toxicity using sediment toxicity testing. *Integrated environmental assessment and management*. 2015;11(1):21-31.

Stojanovska V, Dijkstra DJ, Vogtmann R, Gellhaus A, Scherjon SA, Plosch T. A double-hit pre-eclampsia model results in sex-specific growth restriction patterns. *Disease Models & Mechanisms*. 2019;12(2).

Stojic SS, Stanisic N, Stojic A, Sostaric A. Single and combined effects of air pollutants on circulatory and respiratory system-related mortality in Belgrade, Serbia. *Journal of toxicology and environmental health Part A*. 2016;79(1):17-27.

Stovring H, Pottegard A, Hallas J. Analysis of registry-based case-control studies with a joint exposure and outcome model based on the reverse waiting time distribution. *Pharmacoepidemiology and Drug Safety*. 2018;27:6-.

Strachan G, Preston S, Maciel H, Porter AJ, Paton GI. Use of bacterial biosensors to interpret the toxicity and mixture toxicity of herbicides in freshwater. *Water research*. 2001;35(14):3490-5.

Strandberg L. COMPARISON OF SO₂ ABSORPTION IN THE RESPIRATORY TRACT OF THE RABBIT WITH AND WITHOUT SIMULTANEOUS EXPOSURE TO CARBON PARTICLES. PRELIMINARY REPORT. *Nordisk hygienisk tidskrift*. 1964;45:24-30.

Streffer C, Muller WU. Dose-effect relationships and general mechanisms of combined exposures. *International journal of radiation biology and related studies in physics, chemistry, and medicine*. 1987;51(6):961-9.

Stride E, Porter C, Prieto AG, Pankhurst Q. Enhancement of microbubble mediated gene delivery by simultaneous exposure to ultrasonic and magnetic fields. *Ultrasound in medicine & biology*. 2009;35(5):861-8.

Stromme CB, Julkunen-Tiitto R, Olsen JE, Nybakken L. The dioecious *Populus tremula* displays interactive effects of temperature and ultraviolet-B along a natural gradient. *Environmental and Experimental Botany*. 2018;146:13-26.

Su H, Li Z, Fiati Kenston SS, Shi H, Wang Y, Song X, et al. Joint Toxicity of Different Heavy Metal Mixtures after a Short-Term Oral Repeated-

Administration in Rats. *International journal of environmental research and public health*. 2017;14(10).

Su L, Zhang X, Yuan X, Zhao Y, Zhang D, Qin W. Evaluation of joint toxicity of nitroaromatic compounds and copper to *Photobacterium phosphoreum* and QSAR analysis. *Journal of hazardous materials*. 2012;241-242:450-5.

Su LM, Zhao YH, Yuan X, Mu CF, Wang N, Yan JC. Evaluation of combined toxicity of phenols and lead to *Photobacterium phosphoreum* and quantitative structure-activity relationships. *Bulletin of environmental contamination and toxicology*. 2010;84(3):311-4.

Su YH, Chen TT, Yuan XH. Effects of Groundwater Irrigation and Petroleum Exploiting on Soil Arsenic Levels. *Soil & Sediment Contamination*. 2018;27(7):551-62.

Su YL, Wu D, Xia HP, Zhang CY, Shi JH, Wilkinson KJ, et al. Metallic nanoparticles induced antibiotic resistance genes attenuation of leachate culturable microbiota: The combined roles of growth inhibition, ion dissolution and oxidative stress. *Environment International*. 2019;128:407-16.

Su YW, Quan C, Li XD, Shi YQ, Duan P, Yang KD. Mutual promotion of apoptosis and autophagy in prepubertal rat testes induced by joint exposure of bisphenol A and nonylphenol. *Environmental Pollution*. 2018;243:693-702.

Sugai T, Watanabe T, Kita K, Koike T. Nitrogen loading increases the ozone sensitivity of larch seedlings with higher sensitivity to nitrogen loading. *Science of the Total Environment*. 2019;663:587-95.

Sui Y, Kong H, Huang X, Dupont S, Hu M, Storch D, et al. Combined effects of short-term exposure to elevated CO₂ and decreased O₂ on the physiology and energy budget of the thick shell mussel *Mytilus coruscus*. *Chemosphere*. 2016;155:207-16.

Sukhova TI, Sobolev AI. The assessment of combined exposure to radiation and chemical factors based on the study of the morbidity of personnel in radiation-chemical manufacture. *Meditina truda i promyshlennaia ekologiia*. 1994(9):14-7.

Sullivan K, Kregel M, Bradford W, Stone C, Thompson TA, Heeren T, et al. Neuropsychological functioning in military pesticide applicators from the Gulf War: Effects on information processing speed, attention and visual memory. *Neurotoxicology and Teratology*. 2018;65:1-13.

Sun HY, Pan YZ, Gu Y, Lin ZF. Mechanistic explanation of time-dependent cross-phenomenon based on quorum sensing: A case study of the mixture of

sulfonamide and quorum sensing inhibitor to bioluminescence of *Aliivibrio fischeri*. *Science of the Total Environment*. 2018;630:11-9.

Sun RH, Lu YH, Yang XJ, Chen LD. Understanding the variability of urban heat islands from local background climate and urbanization. *Journal of Cleaner Production*. 2019;208:743-52.

Sun W, Jia YL, Ding XS, Dai LL, Liu CS, Wang JH, et al. Combined effects of pentachlorophenol and its byproduct hexachlorobenzene on endocrine and reproduction in zebrafish. *Chemosphere*. 2019;220:216-26.

Sun XL, Xu Y, Zhang QQ, Li XZ, Yan ZZ. Combined effect of water inundation and heavy metals on the photosynthesis and physiology of *Spartina alterniflora*. *Ecotoxicology and Environmental Safety*. 2018;153:248-58.

Sun YF, Lei J, Wang YY, Cheng JH, Zhou QM, Wang ZS, et al. High concentration of *Phaeocystis globosa* reduces the sensitivity of rotifer *Brachionus plicatilis* to cadmium: Based on an exponential approach fitting the changes in some key life-history traits. *Environmental Pollution*. 2019;246:535-43.

Sures B, Lutz I, Kloas W. Effects of infection with *Anguillicola crassus* and simultaneous exposure with Cd and 3,3',4,4',5-pentachlorobiphenyl (PCB 126) on the levels of cortisol and glucose in European eel (*Anguilla anguilla*). *Parasitology*. 2006;132(Pt 2):281-8.

Suter MK, Karr CJ, John-Stewart GC, Gomez LA, Moraa H, Nyatika D, et al. Implications of Combined Exposure to Household Air Pollution and HIV on Neurocognition in Children. *International Journal of Environmental Research and Public Health*. 2018;15(1).

Suttles KM, Singh NK, Vose JM, Martin KL, Emanuel RE, Coulston JW, et al. Assessment of hydrologic vulnerability to urbanization and climate change in a rapidly changing watershed in the Southeast US. *Science of the Total Environment*. 2018;645:806-16.

Suvorov GA, Sukhorukova IA, Ovakimov VG, Denisov EI. Physiological and hygienic evaluation of combined effects of harmful factors in metallurgy. *Gigiena truda i professional'nye zabolevaniia*. 1990(8):36-8.

Suzuki J, Imamura M, Nakano D, Yamamoto R, Fujita M. Effects of water turbidity and different temperatures on oxidative stress in caddisfly (*Stenopsyche marmorata*) larvae. *Science of the Total Environment*. 2018;630:1078-85.

Suzuki T, Yanagiba Y, Suda M, Wang R-S. Assessment of the genotoxicity of 1,2-dichloropropane and dichloromethane after individual and co-exposure by inhalation in mice. *Journal of occupational health*. 2014;56(3):205-14.

Syberg K, Elleby A, Pedersen H, Cedergreen N, Forbes VE. Mixture toxicity of three toxicants with similar and dissimilar modes of action to *Daphnia magna*. *Ecotoxicology and environmental safety*. 2008;69(3):428-36.

Szabo A, Szabo-Fodor J, Febel H, Mezes M, Balogh K, Bazar G, et al. Individual and Combined Effects of Fumonisin B-1, Deoxynivalenol and Zearalenone on the Hepatic and Renal Membrane Lipid Integrity of Rats. *Toxins*. 2018;10(1).

Szczepanska N, Kudlak B, Namiesnik J. Assessing ecotoxicity and the endocrine potential of selected phthalates, BADGE and BFDGE derivatives in relation to environmentally detectable levels. *Science of the Total Environment*. 2018;610:854-66.

Szyszkowicz M. An approach to represent a combined exposure to air pollution. *International journal of occupational medicine and environmental health*. 2015;28(5):823-30.

Tadei R, Domingues CEC, Malaquias JB, Camilo EV, Malaspina O, Silva-Zacarin ECM. Late effect of larval co-exposure to the insecticide clothianidin and fungicide pyraclostrobin in Africanized *Apis mellifera*. *Scientific Reports*. 2019;9.

Taguchi T, Cho JY, Hao JJ, Nout-Lomas YS, Kang KS, Griffon DJ. Influence of hypoxia on the stemness of umbilical cord matrix-derived mesenchymal stem cells cultured on chitosan films. *Journal of Biomedical Materials Research Part B-Applied Biomaterials*. 2018;106(2):501-11.

Tagun R, Boxall ABA. The Response of *Lemna minor* to Mixtures of Pesticides That Are Commonly Used in Thailand. *Bulletin of Environmental Contamination and Toxicology*. 2018;100(4):516-23.

Taits MI, Dudina TV, Kandybo TS, Elkina AI. Mediator processes in the brain structures in the late periods after external and combined exposure to ionizing radiation. *Radiobiologia*. 1990;30(2):276-9.

Takabatake E, Fujita M, Sawa Y. Combined effects of polychlorinated biphenyls and methylmercury on hepatic microsomal monooxygenases and the hepatotoxic action of bromobenzene. *Journal of pharmacobio-dynamics*. 1980;3(9):463-9.

Takeuchi Y, Hisanaga N, Ono Y, Shibata E, Saito I, Iwata M. Modification of metabolism and neurotoxicity of hexane by co-exposure of toluene. *International archives of occupational and environmental health*. 1993;65(1 Suppl):S227-30.

Tam NT, Berg H, Cong NV. Evaluation of the joint toxicity of chlorpyrifos ethyl and fenobucarb on climbing perch (*Anabas testudineus*) from rice fields in the Mekong Delta, Vietnam. *Environmental Science and Pollution Research*. 2018;25(14):13226-34.

Tam NT, Berg H, Van Cong N. Evaluation of the joint toxicity of chlorpyrifos ethyl and fenobucarb on climbing perch (*Anabas testudineus*) from rice fields in the Mekong Delta, Vietnam. *Environmental science and pollution research international*. 2018;25(14):13226-34.

Tan L, Strong EJ, Woods K, West NP. Homologous alignment cloning: a rapid, flexible and highly efficient general molecular cloning method. *Peerj*. 2018;6.

Tan LR, Xia PF, Zeng RJ, Li Q, Sun XF, Wang SG. Low-level concentrations of aminoglycoside antibiotics induce the aggregation of cyanobacteria. *Environmental Science and Pollution Research*. 2018;25(17):17128-36.

Tan Q, Gu C, Lu L, Chen S, Zeng W, Liu Y. Effect of combined exposure to organic solvents in oil paint on health of painters. *Zhonghua lao dong wei sheng zhi ye bing za zhi = Zhonghua laodong weisheng zhiyebing zazhi = Chinese journal of industrial hygiene and occupational diseases*. 2014;32(4):276-9.

Tan S, Wang H, Peng R. A review on combined biological effects of microwave and other physical or chemical agents. *International Journal of Radiation Research*. 2018;16(2):139-53.

Tan X, Yang X, Huang Q, Li N, Hao W, Huang J. Study of three methods on joint toxicity of diazinon, propoxur and bisphenol A on proliferation of mouse RAW264.7 cell. *Wei sheng yan jiu = Journal of hygiene research*. 2011;40(2):191-5.

Tanaka Y, Tada M. Generalized concentration addition approach for predicting mixture toxicity. *Environmental toxicology and chemistry*. 2017;36(1):265-75.

Tandon SK, Flora SJ. Dose and time effects of combined exposure to lead and ethanol on lead body burden and some neuronal, hepatic and haematopoietic

biochemical indices in the rat. *Journal of applied toxicology : JAT*. 1989;9(5):347-52.

Tandon SK, Tewari PC. Effect of co-exposure to ethanol and cadmium in rats. *Bulletin of environmental contamination and toxicology*. 1987;39(4):633-40.

Tang JYM, Escher BI. Realistic environmental mixtures of micropollutants in surface, drinking, and recycled water: herbicides dominate the mixture toxicity toward algae. *Environmental toxicology and chemistry*. 2014;33(6):1427-36.

Tang L, Lyu GX, Mao W, Xue YC, Li L, Jia CT, et al. Synergistic effects between hydroxyl radicals and hydrated electrons on strengthening decomposition of an s-triazine compound: A combined experimental and theoretical study. *Chemosphere*. 2018;195:365-71.

Tang XQ, Wu M, Li R. Distribution, sedimentation, and bioavailability of particulate phosphorus in the mainstream of the Three Gorges Reservoir. *Water Research*. 2018;140:44-55.

Tao BX, Zhang BH, Dong J, Liu CY, Cui Q. Antagonistic effect of nitrogen additions and warming on litter decomposition in the coastal wetland of the Yellow River Delta, China. *Ecological Engineering*. 2019;131:1-8.

Tao WD. Microbial removal and plant uptake of nitrogen in constructed wetlands: mesocosm tests on influencing factors. *Environmental Science and Pollution Research*. 2018;25(36):36425-37.

Tapbergenov SO, Zhetpisbaev BA, Ilderbayev OZ, Zhetpisbaeva HS, Olzhayeva RR, Prozor II, et al. Free radical oxidation in rats in the delayed period after combined exposure to dust and radiation. *Bulletin of experimental biology and medicine*. 2013;154(6):747-9.

Taranukhin AG, Saransaari P, Kiianmaa K, Oja SS. Hypoglycemia is one possible mechanism in the combined toxicity of ethanol and taurine. *Advances in experimental medicine and biology*. 2015;803:305-12.

Tardif R, Lapare S, Plaa GL, Brodeur J. Effect of simultaneous exposure to toluene and xylene on their respective biological exposure indices in humans. *International archives of occupational and environmental health*. 1991;63(4):279-84.

Tariba B, Zivkovic T, Gajski G, Geric M, Gluscic V, Garaj-Vrhovac V, et al. In vitro effects of simultaneous exposure to platinum and cadmium on the activity of antioxidant enzymes and DNA damage and potential protective effects of selenium and zinc. *Drug and chemical toxicology*. 2017;40(2):228-34.

Tartakovskaia LI, Bykov NA, Gridin NM. Arsenic accumulation and elimination in simultaneous exposure to vibration in miners. *Gigiena truda i professional'nye zabolevaniia*. 1979(8):41-2.

Tatarkin SV, Shafirkin AV, Mukhamedieva LN, Barantseva MI, Ivanova SM. Adaptation processes in mice during chronic combined exposure to radiation and chemical compounds (acetone, ethanol, acetaldehyde) innate to exploration missions. *Aviakosmicheskaiia i ekologicheskaiia meditsina = Aerospace and environmental medicine*. 2012;46(3):20-7.

Teixido E, Barenys M, Pique E, Llobet JM, Gomez-Catalan J. Cardiovascular Effects of PCB 126 (3,3',4,4',5-Pentachlorobiphenyl) in Zebrafish Embryos and Impact of Co-Exposure to Redox Modulating Chemicals. *International Journal of Molecular Sciences*. 2019;20(5).

Teles M, Gravato C, Pacheco M, Santos MA. Juvenile sea bass biotransformation, genotoxic and endocrine responses to beta-naphthoflavone, 4-nonylphenol and 17 beta-estradiol individual and combined exposures. *Chemosphere*. 2004;57(2):147-58.

Temiz C, Cayci G. The effects of gypsum and mulch applications on reclamation parameters and physical properties of an alkali soil. *Environmental Monitoring and Assessment*. 2018;190(6).

Tenchova VB, Pantev TP. Changes in hemopoiesis in the rat as a result of combined exposure to acceleration, irradiation and radiation-modifying agents. *Kosmicheskaiia biologiiia i aviakosmicheskaiia meditsina*. 1987;21(2):85-6.

Testai E. Risk assessment for human health associated to combined exposures and metabolic factors of individual susceptibility. *Epidemiologia e prevenzione*. 2009;33(3 Suppl 1):69-76.

Tete A, Gallais I, Imran M, Chevanne M, Liamin M, Sparfel L, et al. Mechanisms involved in the death of steatotic WIF-B9 hepatocytes co-exposed to benzo a pyrene and ethanol: a possible key role for xenobiotic metabolism and nitric oxide. *Free Radical Biology and Medicine*. 2018;129:323-37.

The European Late Effects Project (EULEP) symposium on effects after combined exposure to ionizing radiation and chemical substances. Pisa, Italy, 19 September 1986. Proceedings. *International journal of radiation biology and related studies in physics, chemistry, and medicine*. 1987;51(6):959-1110.

Thomas DG, Smith JN, Thrall BD, Baer DR, Jolley H, Munusamy P, et al. ISD3: a particokinetic model for predicting the combined effects of particle

sedimentation, diffusion and dissolution on cellular dosimetry for in vitro systems. *Particle and Fibre Toxicology*. 2018;15.

Thompson LC, Walsh L, Martin BL, McGee J, Wood C, Kovalcik K, et al. Ambient Particulate Matter and Acrolein Co-Exposure Increases Myocardial Dyssynchrony in Mice via TRPA1. *Toxicological Sciences*. 2019;167(2):559-72.

Thompson PL, MacLennan MM, Vinebrooke RD. An improved null model for assessing the net effects of multiple stressors on communities. *Global Change Biology*. 2018;24(1):517-25.

Thomulka KW, Lange JH. A mixture toxicity study employing combinations of tributyltin chloride, dibutyltin dichloride, and tin chloride using the marine bacterium *Vibrio harveyi* as the test organism. *Ecotoxicology and environmental safety*. 1996;34(1):76-84.

Thomulka KW, Lange JH. Mixture toxicity of nitrobenzene and trinitrobenzene using the marine bacterium *Vibrio harveyi* as the test organism. *Ecotoxicology and environmental safety*. 1997;36(2):189-95.

Thrupp TJ, Runnalls TJ, Scholze M, Kugathas S, Kortenkamp A, Sumpter JP. The consequences of exposure to mixtures of chemicals: Something from 'nothing' and 'a lot from a little' when fish are exposed to steroid hormones. *Science of the Total Environment*. 2018;619:1482-92.

Thuvander A, Wikman C, Gadhasson I. In vitro exposure of human lymphocytes to trichothecenes: individual variation in sensitivity and effects of combined exposure on lymphocyte function. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 1999;37(6):639-48.

Tian D, Lin Z, Zhou X, Yin D. The underlying toxicological mechanism of chemical mixtures: a case study on mixture toxicity of cyanogenic toxicants and aldehydes to *Photobacterium phosphoreum*. *Toxicology and applied pharmacology*. 2013;272(2):551-8.

Tian LX, Ye Q, Zhen ZL. A new assessment model of social cost of carbon and its situation analysis in China. *Journal of Cleaner Production*. 2019;211:1434-43.

Timchenko OI, Paran'ko NM, Shantyr EE, Kuz'menko SD. The cytogenetic effects of separate and combined exposures to a manganese dioxide aerosol and wide-band noise. *Gigiena i sanitariia*. 1991(11):70-2.

Timme-Laragy AR, Cockman CJ, Matson CW, Di Giulio RT. Synergistic induction of AHR regulated genes in developmental toxicity from co-exposure to two model PAHs in zebrafish. *Aquatic toxicology* (Amsterdam, Netherlands). 2007;85(4):241-50.

Tipping E, Lofts S. Metal mixture toxicity to aquatic biota in laboratory experiments: application of the WHAM-FTOX model. *Aquatic toxicology* (Amsterdam, Netherlands). 2013;142-143:114-22.

Tiwari S, Gupta SK, Kumar K, Trivedi R, Godbole MM. Simultaneous exposure of excess fluoride and calcium deficiency alters VDR, CaR, and calbindin D 9 k mRNA levels in rat duodenal mucosa. *Calcified tissue international*. 2004;75(4):313-20.

Tjornehoj K, Uttenthal A, Viuff B, Larsen LE, Rontved C, Ronsholt L. An experimental infection model for reproduction of calf pneumonia with bovine respiratory syncytial virus (BRSV) based on one combined exposure of calves. *Research in veterinary science*. 2003;74(1):55-65.

Tkhabisimova MD, Komarova LN, Petin VG. Dark recovery of diploid yeast cells after simultaneous exposure to UV-irradiation and hyperthermia. *Tsitologiya*. 2002;44(6):555-60.

Tobias DK, Clish C, Mora S, Li J, Liang LM, Hu FB, et al. Dietary Intakes and Circulating Concentrations of Branched-Chain Amino Acids in Relation to Incident Type 2 Diabetes Risk Among High-Risk Women with a History of Gestational Diabetes Mellitus. *Clinical Chemistry*. 2018;64(8):1203-10.

Toews M, Juanes F, Burton AC. Mammal responses to the human footprint vary across species and stressors. *Journal of Environmental Management*. 2018;217:690-9.

Toman R, Hluchy S, Cabaj M, Massanyi P, Roychoudhury S, Tunegova M. Effect of separate and combined exposure of selenium and diazinon on rat sperm motility by computer assisted semen analysis. *Journal of trace elements in medicine and biology : organ of the Society for Minerals and Trace Elements (GMS)*. 2016;38:144-9.

Tomasek I, Horwell CJ, Bisig C, Damby DE, Comte P, Czerwinski J, et al. Respiratory hazard assessment of combined exposure to complete gasoline exhaust and respirable volcanic ash in a multicellular human lung model at the air-liquid interface. *Environmental Pollution*. 2018;238:977-87.

Tomasek I, Horwell CJ, Bisig C, Damby DE, Comte P, Czerwinski J, et al. Respiratory hazard assessment of combined exposure to complete gasoline exhaust and respirable volcanic ash in a multicellular human lung model at the air-liquid interface. *Environmental pollution (Barking, Essex : 1987)*. 2018;238:977-87.

Tomasek I, Horwell CJ, Damby DE, Barosova H, Geers C, Petri-Fink A, et al. Combined exposure of diesel exhaust particles and respirable Soufriere Hills volcanic ash causes a (pro-)inflammatory response in an in vitro multicellular epithelial tissue barrier model. *Particle and fibre toxicology*. 2016;13(1):67.

Tomaszewska E, Dobrowolski P, Winiarska-Mieczan A, Kwiecien M, Tomczyk A, Muszynski S, et al. Alteration in bone geometric and mechanical properties, histomorphometrical parameters of trabecular bone, articular cartilage, and growth plate in adolescent rats after chronic co-exposure to cadmium and lead in the case of supplementation with green, black, red and white tea. *Environmental toxicology and pharmacology*. 2016;46:36-44.

Tomaszewska E, Muszynski S, Dobrowolski P, Winiarska-Mieczan A, Kwiecien M, Tomczyk-Warunek A, et al. WHITE TEA IS MORE EFFECTIVE IN PRESERVATION OF BONE LOSS IN ADULT RATS CO-EXPOSED TO LEAD AND CADMIUM COMPARED TO BLACK, RED OR GREEN TEA. *Annals of Animal Science*. 2018;18(4):937-53.

Tong F, Zhao Y, Gu X, Gu C, Lee CCC. Joint toxicity of tetracycline with copper(II) and cadmium(II) to *Vibrio fischeri*: effect of complexation reaction. *Ecotoxicology (London, England)*. 2015;24(2):346-55.

Tong T, Wilke CM, Wu J, Binh CTT, Kelly JJ, Gaillard J-F, et al. Combined Toxicity of Nano-ZnO and Nano-TiO₂: From Single- to Multinanomaterial Systems. *Environmental science & technology*. 2015;49(13):8113-23.

Torpy F, Clements N, Pollinger M, Dengel A, Mulvihill I, He C, et al. Testing the single-pass VOC removal efficiency of an active green wall using methyl ethyl ketone (MEK). *Air Quality Atmosphere and Health*. 2018;11(2):163-70.

Torun H. Time-course analysis of salicylic acid effects on ROS regulation and antioxidant defense in roots of hulled and hulless barley under combined stress of drought, heat and salinity. *Physiologia Plantarum*. 2019;165(2):169-82.

Totsuka Y, Ushiyama H, Ishihara J, Sinha R, Goto S, Sugimura T, et al. Quantification of the co-mutagenic beta-carbolines, norharman and harman, in

cigarette smoke condensates and cooked foods. *Cancer letters*. 1999;143(2):139-43.

Toumi H, Boumaiza M, Millet M, Radetski CM, Camara BI, Felten V, et al. Combined acute ecotoxicity of malathion and deltamethrin to *Daphnia magna* (Crustacea, Cladocera): comparison of different data analysis approaches. *Environmental Science and Pollution Research*. 2018;25(18):17781-8.

Toyooka T, Ibuki Y. Co-exposure to benzo a pyrene and UVA induces phosphorylation of histone H2AX. *FEBS letters*. 2005;579(28):6338-42.

Tran DN, Jung EM, Yoo YM, Ahn C, Kang HY, Choi KC, et al. Depletion of follicles accelerated by combined exposure to phthalates and 4-vinylcyclohexene diepoxide, leading to premature ovarian failure in rats. *Reproductive Toxicology*. 2018;80:60-7.

Tran T, Tran H, Mansfield M, Lyman S, Crosman E. Four dimensional data assimilation (FDDA) impacts on WRF performance in simulating inversion layer structure and distributions of CMAQ-simulated winter ozone concentrations in Uintah Basin. *Atmospheric Environment*. 2018;177:75-92.

Tran TT, Janssens L, Dinh KV, Stoks R. An adaptive transgenerational effect of warming but not of pesticide exposure determines how a pesticide and warming interact for antipredator behaviour. *Environmental Pollution*. 2019;245:307-15.

Tran TT, Janssens L, Dinh KV, Stoks R. Transgenerational interactions between pesticide exposure and warming in a vector mosquito. *Evolutionary Applications*. 2018;11(6):906-17.

Tran VN, Dasagrandhi C, Truong VG, Kim YM, Kang HW. Antibacterial activity of *Staphylococcus aureus* biofilm under combined exposure of glutaraldehyde, near-infrared light, and 405-nm laser. *Plos One*. 2018;13(8).

Travis CC, Fox MT, Simmons WM, Lyon BF. Co-exposure to gasoline vapor decreases benzene metabolism in Fischer-344 rats. *Toxicology letters*. 1992;62(2-3):231-40.

Tregub P, Kulikov V, Motin Y, Beshpalov A, Osipov I. Combined exposure to hypercapnia and hypoxia provides its maximum neuroprotective effect during focal ischemic injury in the brain. *Journal of stroke and cerebrovascular diseases : the official journal of National Stroke Association*. 2015;24(2):381-7.

Tregub PP, Kulikov VP, Beshpalov AG, Vvedensky AJ, Osipov IS. Neuroprotective effects of individual or combined exposure to hypoxia and

hypercapnia in the experiment. *Bulletin of experimental biology and medicine*. 2013;155(3):327-9.

Tregub PP, Kulikov VP, Motin YG, Nagibaeva ME, Zabrodina AS. Stress of the Endoplasmic Reticulum of Neurons in Stroke Can Be Maximally Limited by Combined Exposure to Hypercapnia and Hypoxia. *Bulletin of experimental biology and medicine*. 2016;161(4):472-5.

Tregub PP, Malinovskaya NA, Kulikov VP, Salmina AB, Nagibaeva ME, Zabrodina AS, et al. Inhibition of Apoptosis is a Potential Way to Improving Ischemic Brain Tolerance in Combined Exposure to Hypercapnia and Hypoxia. *Bulletin of experimental biology and medicine*. 2016;161(5):666-9.

Trimborn S, Thoms S, Bischof K, Beszteri S. Susceptibility of Two Southern Ocean Phytoplankton Key Species to Iron Limitation and High Light. *Frontiers in Marine Science*. 2019;6.

Trine LSD, Davis EL, Roper C, Truong L, Tanguay RL, Simonich SLM. Formation of PAH Derivatives and Increased Developmental Toxicity during Steam Enhanced Extraction Remediation of Creosote Contaminated Superfund Soil. *Environmental Science & Technology*. 2019;53(8):4460-9.

Trinos MS, Oderii EA. Blood circulation in the liver in combined exposure to lead and electromagnetic fields. *Vrachebnoe delo*. 1982(8):109-11.

Trinos MS. Incidence of digestive organ diseases in workers with combined exposure to lead and UHF-range electromagnetic energy. *Gigiena i sanitariia*. 1982(9):93-4.

Tripp-Valdez MA, Bock C, Lannig G, Koschnick N, Portner HO, Lucassen M. Assessment of muscular energy metabolism and heat shock response of the green abalone *Haliotis fulgens* (Gastropoda: Philipi) at extreme temperatures combined with acute hypoxia and hypercapnia. *Comparative Biochemistry and Physiology B-Biochemistry & Molecular Biology*. 2019;227:1-11.

Trotta RJ, Harmon DL, Klotz JL. Interaction of ergovaline with serotonin receptor 5-HT_{2A} in bovine ruminal and mesenteric vasculature. *Journal of Animal Science*. 2018;96(11):4912-22.

Tsai T-L, Kuo C-C, Pan W-H, Chung Y-T, Chen C-Y, Wu T-N, et al. The decline in kidney function with chromium exposure is exacerbated with co-exposure to lead and cadmium. *Kidney international*. 2017;92(3):710-20.

Tsang WT. Theoretical modeling of the simultaneous exposure and development (SED) process of a positive photoresist. *Applied optics*. 1977;16(7):1918-30.

Tsocheva NT, Kadiiska MB, Poljakova-Krusteva OT, Krustev LP, Yanev SS, Stoytchev TS. Combined effect of fascioliasis and diethylnitrosamine carcinogenesis on the activity of the rat liver monooxygenase system. *Comparative biochemistry and physiology C, Comparative pharmacology and toxicology*. 1992;101(3):475-9.

Tsubono Y, Koizumi Y, Nakaya N, Fujita K, Takahashi H, Hozawa A, et al. Health practices and mortality in Japan: combined effects of smoking, drinking, walking and body mass index in the Miyagi Cohort Study. *Journal of epidemiology*. 2004;14 Suppl 1:S39-45.

Tsutsumi K, Iwatake H, Suzuki T. An experimental model of multistep laryngeal carcinogenesis: combined effect of human papillomavirus type 16 genome and N-methyl-N'-nitro-N-nitrosoguanidine. *Acta oto-laryngologica Supplementum*. 1996;522:89-93.

Tu HP, Ko AMS, Lee SS, Lee CP, Kuo TM, Huang CM, et al. Variants of ALPK1 with ABCG2, SLC2A9, and SLC22A12 increased the positive predictive value for gout. *Journal of Human Genetics*. 2018;63(1):63-70.

Tufan AC, Akdogan I, Turgut G, Adiguzel E. Increased tunel positive cells in CA1, CA2, and CA3 subfields of rat hippocampus due to copper and ethanol co-exposure. *The International journal of neuroscience*. 2008;118(5):647-56.

Tufi S, Wassenaar PNH, Osorio V, de Boer J, Leonards PEG, Lamoree MH. Pesticide Mixture Toxicity in Surface Water Extracts in Snails (*Lymnaea stagnalis*) by an in Vitro Acetylcholinesterase Inhibition Assay and Metabolomics. *Environmental science & technology*. 2016;50(7):3937-44.

Turczynski B, Sroczynski J, Wegiel A, Kuleszyska G. Various plasma components and whole blood viscosity in workers exposed to combined effects of the work environment (mainly mechanical vibration and noise). *Polski tygodnik lekarski (Warsaw, Poland : 1960)*. 1984;39(39):1281-3.

Turczynski B, Sroczynski J. Erythrocyte aggregation indicator and blood viscosity in workers exposed to combined effects of the work environment (mainly mechanical vibration and noise). *Polski tygodnik lekarski (Warsaw, Poland : 1960)*. 1984;39(39):1285-8.

Turrina S, Neri C, De Leo D. Effect of combined exposure to carbon monoxide and cyanides in selected forensic cases. *Journal of clinical forensic medicine*. 2004;11(5):264-7.

Turunen J, Louhi P, Mykraj H, Aroviita J, Putkonen E, Huusko A, et al. Combined effects of local habitat, anthropogenic stress, and dispersal on stream ecosystems: a mesocosm experiment. *Ecological Applications*. 2018;28(6):1606-15.

Turunen MT, Rasmus S, Kietavainen A. The Importance of Reindeer in Northern Finland during World War II (1939-45) and the Post-War Reconstruction. *Arctic*. 2018;71(2):167-82.

Tyler Mehler W, Schuler LJ, Lydy MJ. Examining the joint toxicity of chlorpyrifos and atrazine in the aquatic species: *Lepomis macrochirus*, *Pimephales promelas* and *Chironomus tentans*. *Environmental pollution (Barking, Essex : 1987)*. 2008;152(1):217-24.

Tyshko NV, Seliaskin KE, Mel'nik EA, Pashorina VA, Zhminchenko VM. The separate and combined effects of calcium pantothenate deficiency and cadmium intoxication on rat reproductive function. *Voprosy pitaniia*. 2012;81(1):33-43.

Uchendu C, Ambali SF, Ayo JO, Esievo KAN, Umosen AJ. Erythrocyte osmotic fragility and lipid peroxidation following chronic co-exposure of rats to chlorpyrifos and deltamethrin, and the beneficial effect of alpha-lipoic acid. *Toxicology reports*. 2014;1:373-8.

Uchendu C, Ambali SF, Ayo JO, Esievo KAN. Chronic co-exposure to chlorpyrifos and deltamethrin pesticides induces alterations in serum lipids and oxidative stress in Wistar rats: mitigating role of alpha-lipoic acid. *Environmental Science and Pollution Research*. 2018;25(20):19605-11.

Uchendu C, Ambali SF, Ayo JO, Esievo KAN. Chronic co-exposure to chlorpyrifos and deltamethrin pesticides induces alterations in serum lipids and oxidative stress in Wistar rats: mitigating role of alpha-lipoic acid. *Environmental science and pollution research international*. 2018.

Uchiyama M, Chiba T, Noda K. Co-carcinogenic effect of DDT and PCB feeding on methylcholanthrene-induced chemical carcinogenesis. *Bulletin of environmental contamination and toxicology*. 1974;12(6):687-93.

Unterberger C, Hudson P, Botzen WJW, Schroeder K, Steininger KW. Future Public Sector Flood Risk and Risk Sharing Arrangements: An Assessment for Austria. *Ecological Economics*. 2019;156:153-63.

Urnysheva VV, Kozlov MV, Shishkina LN. Effect of oxidative processes in lipids on the formation of the biological response during combined exposure to X-rays and chemical agents. *Radiatsionnaya biologiya, radioecologiya*. 2005;45(4):416-21.

Urrego F, Scuri M, Auais A, Mohtasham L, Piedimonte G. Combined effects of chronic nicotine and acute virus exposure on neurotrophin expression in rat lung. *Pediatric pulmonology*. 2009;44(11):1075-84.

Ushakov IB, Karpov VN. Changes in the permeability of the blood-brain barrier after combined exposure to gamma-radiation and a modified gas medium. *Radiobiologiya*. 1983;23(6):839-41.

Vaananen K, Leppanen MT, Chen XP, Akkanen J. Metal bioavailability in ecological risk assessment of freshwater ecosystems: From science to environmental management. *Ecotoxicology and Environmental Safety*. 2018;147:430-46.

Vainio H, Savolainen H, Pfaffli P. Biochemical and toxicological effects of combined exposure to 1,1,1-trichloroethane and trichloroethylene on rat liver and brain. *Xenobiotica; the fate of foreign compounds in biological systems*. 1978;8(3):191-6.

Valeriote FA, Baker DG. THE COMBINED EFFECTS OF THERMAL TRAUMA AND X-IRRADIATION ON EARLY MORTALITY. *Radiation research*. 1964;22:693-702.

Valic E, Waldhor T, Konnaris C, Michitsch A, Wolf C. Acquired dyschromatopsia in combined exposure to solvents and alcohol. *International archives of occupational and environmental health*. 1997;70(6):403-6.

Valimana-Traverso J, Amariei G, Boltes K, Garcia MA, Marina ML. Enantiomer stability and combined toxicity of duloxetine and econazole on *Daphnia magna* using real concentrations determined by capillary electrophoresis. *Science of the Total Environment*. 2019;670:770-8.

Van Colen C, Jansson A, Saunier A, Lacoue-Labathe T, Vincx M. Biogeographic vulnerability to ocean acidification and warming in a marine bivalve. *Marine Pollution Bulletin*. 2018;126:308-11.

Van de Perre D, Janssen CR, De Schamphelaere KAC. Combined effects of interspecies interaction, temperature, and zinc on *Daphnia longispina* population dynamics. *Environmental Toxicology and Chemistry*. 2018;37(6):1668-78.

van der Leeuw J, van der Graaf Y, Nathoe HM, de Borst GJ, Kappelle LJ, Visseren FLJ, et al. The separate and combined effects of adiposity and cardiometabolic dysfunction on the risk of recurrent cardiovascular events and mortality in patients with manifest vascular disease. *Heart (British Cardiac Society)*. 2014;100(18):1421-9.

van der Veen A, de Jager MH, Post E, De Groot LES, Lutter R, Melgert BN. Dysfunctional Macrophage Polarization in a COPD Exacerbation Model of Smoke and Influenza Co-Exposure in Mice. *American Journal of Respiratory and Critical Care Medicine*. 2019;199.

van der Voet H, de Mul A, van Klaveren JD. A probabilistic model for simultaneous exposure to multiple compounds from food and its use for risk-benefit assessment. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2007;45(8):1496-506.

van Dormolen M, Hertog CA, van Dijk FJ, Kompier MA, Fortuin R. The quest for interaction: studies on combined exposure. *International archives of occupational and environmental health*. 1990;62(4):279-87.

van Gestel CAM, Loureiro S, Zidar P. Terrestrial isopods as model organisms in soil ecotoxicology: a review. *Zookeys*. 2018(801):127-62.

Van Ginneken M, Blust R, Bervoets L. Combined effects of metal mixtures and predator stress on the freshwater isopod *Asellus aquaticus*. *Aquatic Toxicology*. 2018;200:148-57.

van Haaften LM, Maccarone TJ, Sell PH, Mihos JC, Sand DJ, Kundu A, et al. An Excess of Low-mass X-Ray Binaries in the Outer Halo of NGC 4472. *Astrophysical Journal*. 2018;853(1).

van Mantgem PJ, Falk DA, Williams EC, Das AJ, Stephenson NL. Pre-fire drought and competition mediate post-fire conifer mortality in western US National Parks. *Ecological Applications*. 2018;28(7):1730-9.

Van Meter RJ, Adelizzi R, Glinski DA, Henderson WM. Agrochemical Mixtures and Amphibians: The Combined Effects of Pesticides and Fertilizer on Stress, Acetylcholinesterase Activity, and Bioaccumulation in a Terrestrial Environment. *Environmental Toxicology and Chemistry*. 2019;38(5):1052-61.

van Nierop LE, Slottje P, van Zandvoort M, Kromhout H. Simultaneous exposure to MRI-related static and low-frequency movement-induced time-varying magnetic fields affects neurocognitive performance: A double-blind randomized crossover study. *Magnetic resonance in medicine*. 2015;74(3):840-9.

van Oorschot M, Kleinhans M, Buijse T, Geerling G, Middelkoop H. Combined effects of climate change and dam construction on riverine ecosystems. *Ecological Engineering*. 2018;120:329-44.

Van Regenmortel T, De Schamphelaere KAC. Mixtures of Cu, Ni, and Zn Act Mostly Noninteractively on *Pseudokirchneriella subcapitata* Growth in Natural Waters. *Environmental Toxicology and Chemistry*. 2018;37(2):587-98.

van Vliet PCJ, de Goede RGM. Nematode-based risk assessment of mixture toxicity in a moderately polluted river floodplain in The Netherlands. *The Science of the total environment*. 2008;406(3):449-54.

van Wezel AP, de Vries DA, Sijm D, Opperhuizen A. Use of the lethal body burden in the evaluation of mixture toxicity. *Ecotoxicology and environmental safety*. 1996;35(3):236-41.

Vapaatalo H, Karppanen H. Combined toxicity of ethanol with chlorpromazine, diazepam, chlormethiazole or pentobarbital in mice. *Agents and actions*. 1969;1(2):43-5.

Varaksin AN, Katsnelson BA, Panov VG, Privalova LI, Kireyeva EP, Valamina IE, et al. Some considerations concerning the theory of combined toxicity: a case study of subchronic experimental intoxication with cadmium and lead. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2014;64:144-56.

Varaksin AN, Panov VG, Katsnelson BA, Minigalieva IA. Using Various Nonlinear Response Surfaces for Mathematical Description of the Type of Combined Toxicity. *Dose-Response*. 2018;16(4).

Varetskii VV, Snezhko VV. The dynamic behavioral characteristics of rats in a maze after isolated and combined exposures to ionizing radiation and psychoemotional stress. *Radiobiologiya*. 1993;33(2):265-70.

Vasickova J, Hvezdova M, Kosubova P, Hofman J. Ecological risk assessment of pesticide residues in arable soils of the Czech Republic. *Chemosphere*. 2019;216:479-87.

Vatulina GG. Metabolic changes in rat muscle tissue after separate and combined exposure to iodine and strontium radioisotopes. *Radiobiologia*. 1977;17(5):728-32.

Vay SU, Flitsch LJ, Rabenstein M, Rogall R, Blaschke S, Kleinhaus J, et al. The plasticity of primary microglia and their multifaceted effects on endogenous neural stem cells in vitro and in vivo. *Journal of Neuroinflammation*. 2018;15.

Veissi M, Jafarirad S, Ahangarpour A, Mohaghegh SM, Malehi AS. Co-exposure to endocrine disruptors: effect of bisphenol A and soy extract on glucose homeostasis and related metabolic disorders in male mice. *Endocrine regulations*. 2018;52(2):76-84.

Velez C, Teixeira M, Wrona FJ, Soares AMVM, Figueira E, Freitas R. Clam *Ruditapes philippinarum* recovery from short-term exposure to the combined effect of salinity shifts and Arsenic contamination. *Aquatic toxicology* (Amsterdam, Netherlands). 2016;173:154-64.

Vellinger C, Felten V, Sornom P, Rousselle P, Beisel J-N, Usseglio-Polatera P. Behavioural and physiological responses of *Gammarus pulex* exposed to cadmium and arsenate at three temperatures: individual and combined effects. *PloS one*. 2012;7(6):e39153.

Venet T, Carreres-Pons M, Chalansonnet M, Thomas A, Merlen L, Nunge H, et al. Continuous exposure to low-frequency noise and carbon disulfide: Combined effects on hearing. *Neurotoxicology*. 2017;62:151-61.

Verdina A, Zito R, Federico A, Falasca G, Galati R. Divergent synergic effects in carcinogenesis initiation by simultaneous exposure to two genotoxic carcinogens. In vivo (Athens, Greece). 2000;14(6):753-6.

Verma SK, Dua R, Gill KD. Impaired energy metabolism after co-exposure to lead and ethanol. *Basic & clinical pharmacology & toxicology*. 2005;96(6):475-9.

Verriopoulos G, Dimas S. Combined toxicity of copper, cadmium, zinc, lead, nickel, and chrome to the copepod *Tisbe holothuriae*. *Bulletin of environmental contamination and toxicology*. 1988;41(3):378-84.

Verriopoulos G, Moraitou-Apostolopoulou M, Milliou E. Combined toxicity of four toxicants (Cu, Cr, oil, oil dispersant) to *Artemia salina*. *Bulletin of environmental contamination and toxicology*. 1987;38(3):483-90.

Verschaeve L, Wambacq S, Anthonissen R, Maes A. Co-exposure of ELF-magnetic fields and chemical mutagens: An investigation of genotoxicity with the

SOS-based VITOTOX test in *Salmonella typhimurium*. Mutation research Genetic toxicology and environmental mutagenesis. 2016;795:31-5.

Versieren L, Evers S, AbdElgawad H, Asard H, Smolders E. Mixture toxicity of copper, cadmium, and zinc to barley seedlings is not explained by antioxidant and oxidative stress biomarkers. Environmental toxicology and chemistry. 2017;36(1):220-30.

Versieren L, Evers S, De Schamphelaere K, Blust R, Smolders E. Mixture toxicity and interactions of copper, nickel, cadmium, and zinc to barley at low effect levels: Something from nothing? Environmental toxicology and chemistry. 2016;35(10):2483-92.

Vetrova EG, Drozdova TE, Tigranian RA, Shul'zhenko EB. Energy-metabolism enzymes during combined exposure of the body to simulated weightlessness and gravitational overloads. Kosmicheskaiia biologiiia i aviakosmicheskaiia meditsina. 1981;15(5):34-8.

Vettori MV, Goldoni M, Caglieri A, Poli D, Folesani G, Ceccatelli S, et al. Antagonistic effects of methyl-mercury and PCB153 on PC12 cells after a combined and simultaneous exposure. Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association. 2006;44(9):1505-12.

Vicari T, Dagostim AC, Klingelfus T, Galvan GL, Monteiro PS, Pereira LD, et al. Co-exposure to titanium dioxide nanoparticles (NpTiO₂) and lead at environmentally relevant concentrations in the Neotropical fish species *Hoplias intermedius*. Toxicology Reports. 2018;5:1032-43.

Vieira LR, Morgado F, Nogueira AJA, Soares A, Guilhermino L. Integrated multivariate approach of ecological and ecotoxicological parameters in coastal environmental monitoring studies. Ecological Indicators. 2018;95:1128-42.

Villarini M, Gambelunghe A, Giustarini D, Ambrosini MV, Fatigoni C, Rossi R, et al. No evidence of DNA damage by co-exposure to extremely low frequency magnetic fields and aluminum on neuroblastoma cell lines. Mutation research. 2017;823:11-21.

Villarini M, Moretti M, Scassellati-Sforzolini G, Boccioli B, Pasquini R. Effects of co-exposure to extremely low frequency (50 Hz) magnetic fields and xenobiotics determined in vitro by the alkaline comet assay. The Science of the total environment. 2006;361(1-3):208-19.

Villeneuve DC, van Logten MJ, den Tonkelaar EM, Rauws AG, Kroes R, van Esch GJ. The combined effect of food restriction and parathion exposure in rats. *Archives of environmental contamination and toxicology*. 1978;7(1):37-45.

Villeneuve DL, Angrish MM, Fortin MC, Katsiadaki I, Leonard M, Margiotta-Casaluci L, et al. Adverse outcome pathway networks II: Network analytics. *Environmental Toxicology and Chemistry*. 2018;37(6):1734-48.

Villeneuve DL, Jensen KM, Cavallin JE, Durhan EJ, Garcia-Reyero N, Kahl MD, et al. Effects of the antimicrobial contaminant triclocarban, and co-exposure with the androgen 17beta-trenbolone, on reproductive function and ovarian transcriptome of the fathead minnow (*Pimephales promelas*). *Environmental toxicology and chemistry*. 2017;36(1):231-42.

Vil'-Vil'iams IF, Shul'zhenko EB. Functional state of the cardiovascular system system during combined exposure to 28-day immersion, rotation in a short radius centrifuge, and physical loading on a bicycle ergometer. *Kosmicheskaiia biologiiia i aviakosmicheskaiia meditsina*. 1980;14(2):42-5.

Vitoux MA, Kessal K, Baudouin C, Laprevote O, Parsadaniantz SM, Achard S, et al. Formaldehyde Gas Exposure Increases Inflammation in an In Vitro Model of Dry Eye. *Toxicological Sciences*. 2018;165(1):108-17.

Vlachokostas C, Achillas C, Michailidou AV, Moussiopoulos N. Measuring combined exposure to environmental pressures in urban areas: an air quality and noise pollution assessment approach. *Environment international*. 2012;39(1):8-18.

Vlachokostas C, Baniyas G, Athanasiadis A, Achillas C, Akylas V, Moussiopoulos N. Cense: a tool to assess combined exposure to environmental health stressors in urban areas. *Environment international*. 2014;63:1-10.

Vlaeminck K, Viaene KPJ, Van Sprang P, Baken S, De Schamphelaere KAC. The Use of Mechanistic Population Models in Metal Risk Assessment: Combined Effects of Copper and Food Source on *Lymnaea stagnalis* Populations. *Environmental Toxicology and Chemistry*. 2019;38(5):1104-19.

Vodichenska T. The effect of chronic combined exposure to nickel and lead on the enzymatic indices in body uptake with the drinking water. *Problemi na khigienata*. 1992;17:48-56.

Vodickova L, Frantik E, Vodickova A. Neutrotropic effects and blood levels of solvents at combined exposures: binary mixtures of toluene, o-xylene and acetone in rats and mice. *Central European journal of public health*. 1995;3(2):57-64.

Vorontsova ZA, Dedov VI, Ushakov IB. Tissue basophils of the thyroid gland in separate and combined exposure to ionizing radiation and ethanol. *Aviakosmicheskaja i ekologicheskaja meditsina = Aerospace and environmental medicine*. 1997;31(3):39-43.

Voskanian KS, Mitsyn GV, Gaevskii VN. Some specific effects of the combined exposure to gamma and laser radiations on survivability of mouse fibroblasts in vitro. *Aviakosmicheskaja i ekologicheskaja meditsina = Aerospace and environmental medicine*. 2009;43(2):32-6.

Voss R, Quaas MF, Stiasny MH, Hansel M, Pinto G, Lehmann A, et al. Ecological-economic sustainability of the Baltic cod fisheries under ocean warming and acidification. *Journal of Environmental Management*. 2019;238:110-8.

Vrdoljak AL, Fuchs N, Mikolic A, Zunec S, Karaconji IB, Juric A, et al. Irinotecan and Delta(9)-Tetrahydrocannabinol Interactions in Rat Liver: A Preliminary Evaluation Using Biochemical and Genotoxicity Markers. *Molecules*. 2018;23(6).

Vukov D, Ilic M, Cuk M, Radulovic S, Igic R, Janauer GA. Combined effects of physical environmental conditions and anthropogenic alterations are associated with macrophyte habitat fragmentation in rivers - Study of the Danube in Serbia. *Science of the Total Environment*. 2018;634:780-90.

Wachman EM, Warden AH, Thomas Z, Ann Thomas-Lewis J, Shrestha H, Nikita FNU, et al. Impact of psychiatric medication co-exposure on Neonatal Abstinence Syndrome severity. *Drug and Alcohol Dependence*. 2018;192:45-50.

Wade A, Lin CH, Kurkul C, Regan ER, Johnson RM. Combined Toxicity of Insecticides and Fungicides Applied to California Almond Orchards to Honey Bee Larvae and Adults. *Insects*. 2019;10(1).

Wagner ND, Simpson AJ, Simpson MJ. Sublethal metabolic responses to contaminant mixture toxicity in *Daphnia magna*. *Environmental Toxicology and Chemistry*. 2018;37(9):2448-57.

Wahidulla S, Rajamanickam YR. Detection of DNA damage in fish *Oreochromis mossambicus* induced by co-exposure to phenanthrene and nitrite by ESI-MS/MS. *Environmental science and pollution research international*. 2010;17(2):441-52.

Wakabayashi K, Nagao M, Kawachi T, Sugimura T. Co-mutagenic effect of norharman with N-nitrosamine derivatives. *Mutation research*. 1981;80(1):1-7.

Walter H, Consolaro F, Gramatica P, Scholze M, Altenburger R. Mixture toxicity of priority pollutants at no observed effect concentrations (NOECs). *Ecotoxicology* (London, England). 2002;11(5):299-310.

Wang B, Yu G, Hu H, Wang L. Quantitative structure-activity relationships and mixture toxicity of substituted benzaldehydes to *Photobacterium phosphoreum*. *Bulletin of environmental contamination and toxicology*. 2007;78(6):503-9.

Wang B, Zhao J-s, Yu Y-j, Wang X-d, Wang L-s. Quantitative structure-activity relationships and joint toxicity of substituted biphenyls. *Huan jing ke xue= Huanjing kexue*. 2004;25(3):89-93.

Wang C, Liang C, Ma J, Manthari RK, Niu R, Wang J, et al. Co-exposure to fluoride and sulfur dioxide on histological alteration and DNA damage in rat brain. *Journal of biochemical and molecular toxicology*. 2018;32(2).

Wang C, Liang C, Ma JJ, Manthari RK, Niu RY, Wang JM, et al. Co-exposure to fluoride and sulfur dioxide on histological alteration and DNA damage in rat brain. *Journal of Biochemical and Molecular Toxicology*. 2018;32(2).

Wang C, Lu G, Tang Z, Guo X. Quantitative structure-activity relationships for joint toxicity of substituted phenols and anilines to *Scenedesmus obliquus*. *Journal of environmental sciences (China)*. 2008;20(1):115-9.

Wang CJ. Pathological study of the carcinogenic and co-carcinogenic effects of *Moniliformyces* culture on the esophagus and fore-stomach in mice. *Zhonghua bing li xue za zhi = Chinese journal of pathology*. 1987;16(2):147-9.

Wang D, Liang D, Wang S, Hu B, Wei W. Individual and joint toxicity effects of Cu, Cr(III), and Cr(VI) on pakchoi: a comparison between solution and soil cultures. *Biological trace element research*. 2012;146(1):116-23.

Wang D, Lin Z, Ding X, Hu J, Liu Y. The Comparison of the Combined Toxicity between Gram-negative and Gram-positive Bacteria: a Case Study of Antibiotics and Quorum-sensing Inhibitors. *Molecular informatics*. 2016;35(2):54-61.

Wang D, Shi J, Xiong Y, Hu J, Lin Z, Qiu Y, et al. A QSAR-based mechanistic study on the combined toxicity of antibiotics and quorum sensing inhibitors against *Escherichia coli*. *Journal of hazardous materials*. 2018;341:438-47.

Wang D, Wang Z, Zhou M, Li W, He M, Zhang X, et al. The combined effect of cigarette smoking and occupational noise exposure on hearing loss:

evidence from the Dongfeng-Tongji Cohort Study. *Scientific reports*. 2017;7(1):11142.

Wang D, Wu X, Lin Z, Ding Y. A comparative study on the binary and ternary mixture toxicity of antibiotics towards three bacteria based on QSAR investigation. *Environmental research*. 2018;162:127-34.

Wang D, Zhang Q, Zheng Y, Lin D, Yu Y. Estimating the combined toxicity of flufenacet and imazaquin to sorghum with pore water herbicide concentration. *Journal of environmental sciences (China)*. 2016;41:154-61.

Wang DL, Shi JY, Xiong YN, Hu JY, Lin ZF, Qiu YL, et al. A QSAR-based mechanistic study on the combined toxicity of antibiotics and quorum sensing inhibitors against *Escherichia coli*. *Journal of Hazardous Materials*. 2018;341:438-47.

Wang DL, Wu XD, Lin ZF, Ding YY. A comparative study on the binary and ternary mixture toxicity of antibiotics towards three bacteria based on QSAR investigation. *Environmental Research*. 2018;162:127-34.

Wang DX, Wang PF, Wang C, Ao YH. Effects of interactions between humic acid and heavy metal ions on the aggregation of TiO₂ nanoparticles in water environment. *Environmental Pollution*. 2019;248:834-44.

Wang DZ, Zhu WT, Yan S, Meng ZY, Yan J, Teng MM, et al. Impaired lipid and glucose homeostasis in male mice offspring after combined exposure to low-dose bisphenol A and arsenic during the second half of gestation. *Chemosphere*. 2018;210:998-1005.

Wang F, Gao J, Chen L, Zhou ZQ, Liu DH, Wang P. Enantioselective bioaccumulation and metabolism of lactofen in zebrafish *Danio rerio* and combined effects with its metabolites. *Chemosphere*. 2018;213:443-52.

Wang F, Liu Q, Jin L, Hu S, Luo R, Han M, et al. Combination exposure of melamine and cyanuric acid is associated with polyuria and activation of NLRP3 inflammasome in rats. *American journal of physiology Renal physiology*. 2018.

Wang F, Liu W, Jin Y, Dai J, Zhao H, Xie Q, et al. Interaction of PFOS and BDE-47 co-exposure on thyroid hormone levels and TH-related gene and protein expression in developing rat brains. *Toxicological sciences : an official journal of the Society of Toxicology*. 2011;121(2):279-91.

Wang F, Qi H-X, You J. Joint toxicity of sediment-associated DDT and copper to a polychaete, *Nereis succinea*. *Ecotoxicology (London, England)*. 2015;24(2):424-32.

Wang F, Zhang H, Geng N, Ren X, Zhang B, Gong Y, et al. A metabolomics strategy to assess the combined toxicity of polycyclic aromatic hydrocarbons (PAHs) and short-chain chlorinated paraffins (SCCPs). *Environmental pollution* (Barking, Essex : 1987). 2018;234:572-80.

Wang FD, Zhang HJ, Geng NB, Ren XQ, Zhang BQ, Gong YF, et al. A metabolomics strategy to assess the combined toxicity of polycyclic aromatic hydrocarbons (PAHs) and short-chain chlorinated paraffins (SCCPs). *Environmental Pollution*. 2018;234:572-80.

Wang FF, Liu QJ, Jin LZ, Hu S, Luo RF, Han MK, et al. Combination exposure of melamine and cyanuric acid is associated with polyuria and activation of NLRP3 inflammasome in rats. *American Journal of Physiology-Renal Physiology*. 2018;315(2):F199-F210.

Wang FT, An PL, Huang C, Zhang Z, Hao JM. Is afforestation-induced land use change the main contributor to vegetation dynamics in the semiarid region of North China? *Ecological Indicators*. 2018;88:282-91.

Wang FY, Adams CA, Shi ZY, Sun YH. Combined effects of ZnO NPs and Cd on sweet sorghum as influenced by an arbuscular mycorrhizal fungus. *Chemosphere*. 2018;209:421-9.

Wang G, Gu S, Chen J, Wu X, Yu J. Assessment of health and economic effects by PM_{2.5} pollution in Beijing: a combined exposure-response and computable general equilibrium analysis. *Environmental technology*. 2016;37(24):3131-8.

Wang GL, Zhang R, Zhou YT, Wang AL, Xu T, Zhang MZ, et al. Combined Effects of A Body Shape Index and Serum C-reactive Protein on Ischemic Stroke Incidence among Mongolians in China. *Biomedical and Environmental Sciences*. 2019;32(3):169-76.

Wang G-y, Zhou Q-x, Hu X-m, Hua T, Li F. Single and joint toxicity of perchloroethylene and cadmium on *Ctenopharyngodon idellus*. *Ying yong sheng tai xue bao = The journal of applied ecology*. 2007;18(5):1120-4.

Wang H, Peng Y, Zhang XY, Liu HL, Zhang M, Che HZ, et al. Contributions to the explosive growth of PM_{2.5} mass due to aerosol-radiation feedback and decrease in turbulent diffusion during a red alert heavy haze in Beijing-Tianjin-Hebei, China. *Atmospheric Chemistry and Physics*. 2018;18(23):17717-33.

Wang HB, Hu C, Shen Y, Shi BY, Zhao D, Xing XC. Response of microorganisms in biofilm to sulfadiazine and ciprofloxacin in drinking water distribution systems. *Chemosphere*. 2019;218:197-204.

Wang HB, Shen Y, Hu C, Xing XC, Zhao D. Sulfadiazine/ciprofloxacin promote opportunistic pathogens occurrence in bulk water of drinking water distribution systems. *Environmental Pollution*. 2018;234:71-8.

Wang HF, Chen JM, Suda M, Yanagiba Y, Weng ZQ, Wang RS. Acute inhalation co-exposure to 1,2-dichloropropane and dichloromethane cause liver damage by inhibiting mitochondrial respiration and defense ability in mice. *Journal of Applied Toxicology*. 2019;39(2):260-70.

Wang JH, Wang LJ, Zhu LS, Wang J. Individual and combined effects of enrofloxacin and cadmium on soil microbial biomass and the ammonia-oxidizing functional gene. *Science of the Total Environment*. 2018;624:900-7.

Wang JZ, Zheng BH, Kang XM, Yu H, Li D, Jiang X. Diel Variation of Water Inorganic Nitrogen and Phosphorus during Algal Blooms. *Polish Journal of Environmental Studies*. 2019;28(2):867-75.

Wang L, Dong H, Song G, Zhang R, Pan J, Han J. TXNDC5 synergizes with HSC70 to exacerbate the inflammatory phenotype of synovial fibroblasts in rheumatoid arthritis through NF-kappaB signaling. *Cellular & molecular immunology*. 2017.

Wang L, Kang Y, Liang S, Chen D, Zhang Q, Zeng L, et al. Synergistic effect of co-exposure to cadmium (II) and 4-n-nonylphenol on growth inhibition and oxidative stress of *Chlorella sorokiniana*. *Ecotoxicology and environmental safety*. 2018;154:145-53.

Wang L, Kang Y, Liang SY, Chen DY, Zhang QY, Zeng LX, et al. Synergistic effect of co-exposure to cadmium (II) and 4-n-nonylphenol on growth inhibition and oxidative stress of *Chlorella sorokiniana*. *Ecotoxicology and Environmental Safety*. 2018;154:145-53.

Wang L, Zheng M, Gao Y, Cui J. In vitro study on the joint hepatotoxicity upon combined exposure of cadmium and BDE-209. *Environmental toxicology and pharmacology*. 2018;57:62-9.

Wang LH, Tian F, Wang YH, Wu ZD, Schurgers G, Fensholt R. Acceleration of global vegetation greenup from combined effects of climate change and human land management. *Global Change Biology*. 2018;24(11):5484-99.

Wang LQ, Li Y, Niu LH, Zhang WL, Zhang HJ, Wang LF, et al. Response of ammonia oxidizing archaea and bacteria to decabromodiphenyl ether and copper contamination in river sediments. *Chemosphere*. 2018;191:858-67.

Wang LX, Zheng MM, Gao Y, Cui JS. In vitro study on the joint hepatotoxicity upon combined exposure of cadmium and BDE-209. *Environmental Toxicology and Pharmacology*. 2018;57:62-9.

Wang M, Zhou Q. Single and joint toxicity of chlorimuron-ethyl, cadmium, and copper acting on wheat *Triticum aestivum*. *Ecotoxicology and environmental safety*. 2005;60(2):169-75.

Wang N, Wang XC, Ma X. Characteristics of concentration-inhibition curves of individual chemicals and applicability of the concentration addition model for mixture toxicity prediction. *Ecotoxicology and environmental safety*. 2015;113:176-82.

Wang P, Luo L, Ke L, Luan T, Tam NF-Y. Combined toxicity of polycyclic aromatic hydrocarbons and heavy metals to biochemical and antioxidant responses of free and immobilized *Selenastrum capricornutum*. *Environmental toxicology and chemistry*. 2013;32(3):673-83.

Wang S, Tian D, Zheng W, Jiang S, Wang X, Andersen ME, et al. Combined exposure to 3-chloro-4-dichloromethyl-5-hydroxy-2(5H)-furanone and microsytin-LR increases genotoxicity in Chinese hamster ovary cells through oxidative stress. *Environmental science & technology*. 2013;47(3):1678-87.

Wang S, Wang Z, Chen M, Fang H, Wang D. Co-exposure of Freshwater Microalgae to Tetrabromobisphenol A and Sulfadiazine: Oxidative Stress Biomarker Responses and Joint Toxicity Prediction. *Bulletin of environmental contamination and toxicology*. 2017;99(4):438-44.

Wang SZ, Pan KW, Tariq A, Zhang L, Sun XM, Li ZL, et al. Combined effects of cropping types and simulated extreme precipitation on the community composition and diversity of soil macrofauna in the eastern Qinghai-Tibet Plateau. *Journal of Soils and Sediments*. 2018;18(11):3215-27.

Wang T, Wang D, Lin Z, An Q, Yin C, Huang Q. Prediction of mixture toxicity from the hormesis of a single chemical: A case study of combinations of antibiotics and quorum-sensing inhibitors with gram-negative bacteria. *Chemosphere*. 2016;150:159-67.

Wang W, Lampi MA, Huang X-D, Gerhardt K, Dixon DG, Greenberg BM. Assessment of mixture toxicity of copper, cadmium, and phenanthrenequinone to

the marine bacterium *Vibrio fischeri*. *Environmental toxicology*. 2009;24(2):166-77.

Wang XD, Meng XQ, Ma YB, Pu X, Zhong X. The prediction of combined toxicity of Cu-Ni for barley using an extended concentration addition model. *Environmental Pollution*. 2018;242:136-42.

Wang X-F, Zhou Q-X. Joint toxicity of methamidophos and cadmium acting on *Abelmoschus manihot*. *Journal of environmental sciences (China)*. 2005;17(3):379-83.

Wang Y, An X, Shen W, Chen L, Jiang J, Wang Q, et al. Individual and combined toxic effects of herbicide atrazine and three insecticides on the earthworm, *Eisenia fetida*. *Ecotoxicology (London, England)*. 2016;25(5):991-9.

Wang Y, Chen C, Zhao X, Wang Q, Qian Y. Assessing joint toxicity of four organophosphate and carbamate insecticides in common carp (*Cyprinus carpio*) using acetylcholinesterase activity as an endpoint. *Pesticide biochemistry and physiology*. 2015;122:81-5.

Wang Y, Ezemaduka AN, Li Z, Chen Z, Song C. Joint Toxicity of Arsenic, Copper and Glyphosate on Behavior, Reproduction and Heat Shock Protein Response in *Caenorhabditis elegans*. *Bulletin of environmental contamination and toxicology*. 2017;98(4):465-71.

Wang Y, Wang TY, Ban YL, Shen CC, Shen Q, Chai XJ, et al. Di-(2-ethylhexyl) Phthalate Exposure Modulates Antioxidant Enzyme Activity and Gene Expression in Juvenile and Adult *Daphnia magna*. *Archives of Environmental Contamination and Toxicology*. 2018;75(1):145-56.

Wang Y, Wu L, Li J, Fang D, Zhong C, Chen JX, et al. Synergistic exacerbation of mitochondrial and synaptic dysfunction and resultant learning and memory deficit in a mouse model of diabetic Alzheimer's disease. *Journal of Alzheimer's disease : JAD*. 2015;43(2):451-63.

Wang Y, Wu S, Chen J, Zhang C, Xu Z, Li G, et al. Single and joint toxicity assessment of four currently used pesticides to zebrafish (*Danio rerio*) using traditional and molecular endpoints. *Chemosphere*. 2018;192:14-23.

Wang Y, Yuan L, Yao C, Ding L, Li C, Fang J, et al. A combined toxicity study of zinc oxide nanoparticles and vitamin C in food additives. *Nanoscale*. 2014;6(24):15333-42.

Wang Y, Zhang M, Zhao LF, Zhang W, Zhao T, Chu JX, et al. Effects of tetrabromobisphenol A on maize (*Zea mays* L.) physiological indexes, soil enzyme activity, and soil microbial biomass. *Ecotoxicology*. 2019;28(1):1-12.

Wang YH, Dai DJ, Yu YJ, Yang GL, Shen WF, Wang Q, et al. Evaluation of joint effects of cyprodinil and kresoxim-methyl on zebrafish, *Danio rerio*. *Journal of Hazardous Materials*. 2018;352:80-91.

Wang YH, Wu SG, Chen JE, Zhang CP, Xu ZL, Li G, et al. Single and joint toxicity assessment of four currently used pesticides to zebrafish (*Danio rerio*) using traditional and molecular endpoints. *Chemosphere*. 2018;192:14-23.

Wang YY, Wang KX, Hao Y, Adeel M, Ali A, Wang YX, et al. DIFFERENTIATION OF PHYSIOLOGICAL RESPONSES BETWEEN HIGH SALT TOLERANCE SEA RICE AND HYBRID RICE TO CO-EXPOSURE OF CERIUM OXIDE NANOPARTICLES AND SODIUM CHLORIDE. *Fresenius Environmental Bulletin*. 2019;28(1):285-97.

Wang Z, Chen J, Huang L, Wang Y, Cai X, Qiao X, et al. Integrated fuzzy concentration addition-independent action (IFCA-IA) model outperforms two-stage prediction (TSP) for predicting mixture toxicity. *Chemosphere*. 2009;74(5):735-40.

Wang Z, Zhang J, Li E, Zhang L, Wang X, Song L. Combined toxic effects and mechanisms of microcystin-LR and copper on *Vallisneria Natans* (Lour.) Hara seedlings. *Journal of hazardous materials*. 2017;328:108-16.

Wang ZH, Luo ZX, Yan CZ, Rosenfeldt RR, Seitz F, Gui HR. Biokinetics of arsenate accumulation and release in *Microcystis aeruginosa* regulated by common environmental factors: Practical implications for enhanced bioremediation. *Journal of Cleaner Production*. 2018;199:112-20.

Wang ZH, Zhao JL, Wang T, Du XH, Xie JG. Fine-particulate matter aggravates cigarette smoke extract-induced airway inflammation via Wnt5a-ERK pathway in COPD. *International Journal of Chronic Obstructive Pulmonary Disease*. 2019;14:979-94.

Wang ZQ, Liu CS, Wu JD, Jiang HS, Zhao YM. Impact of screening coals on screen surface and multi-index optimization for coal cleaning production. *Journal of Cleaner Production*. 2018;187:562-75.

Wang ZY, Chen QW, Hu LM, Wang M. Combined effects of binary antibiotic mixture on growth, microcystin production, and extracellular release of

Microcystis aeruginosa: application of response surface methodology. *Environmental Science and Pollution Research*. 2018;25(1):736-48.

Wangikar PB, Dwivedi P, Sinha N, Sharma AK, Telang AG. Teratogenic effects in rabbits of simultaneous exposure to ochratoxin A and aflatoxin B1 with special reference to microscopic effects. *Toxicology*. 2005;215(1-2):37-47.

Warne MS, Hawker DW. The number of components in a mixture determines whether synergistic and antagonistic or additive toxicity predominate: the funnel hypothesis. *Ecotoxicology and environmental safety*. 1995;31(1):23-8.

Wassenberg DM, Swails EE, Di Giulio RT. Effects of single and combined exposures to benzo(a)pyrene and 3,3',4,4'-pentachlorobiphenyl on EROD activity and development in *Fundulus heteroclitus*. *Marine environmental research*. 2002;54(3-5):279-83.

Watanabe MX, Jones SP, Iwata H, Kim E-Y, Kennedy SW. Effects of co-exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin and perfluorooctane sulfonate or perfluorooctanoic acid on expression of cytochrome P450 isoforms in chicken (*Gallus gallus*) embryo hepatocyte cultures. *Comparative biochemistry and physiology Toxicology & pharmacology : CBP*. 2009;149(4):605-12.

Watson SA, Allan BJM, McQueen DE, Nicol S, Parsons DM, Pether SMJ, et al. Ocean warming has a greater effect than acidification on the early life history development and swimming performance of a large circumglobal pelagic fish. *Global Change Biology*. 2018;24(9):4368-85.

Weeks CE, Rao TK, Young JA, Slaga TJ, Epler JL. Effect of weak-, non-, and co-carcinogenic chemicals on 2-acetylaminofluorene-induced mutation in *Salmonella typhimurium*. *Toxicology*. 1979;14(3):255-62.

Wei C, Chen M, You H, Qiu F, Wen H, Yuan J, et al. Formaldehyde and co-exposure with benzene induce compensation of bone marrow and hematopoietic stem/progenitor cells in BALB/c mice during post-exposure period. *Toxicology and applied pharmacology*. 2017;324:36-44.

Wei L, Shao W-W, Ding G-H, Fan X-L, Yu M-L, Lin Z-H. Acute and joint toxicity of three agrochemicals to Chinese tiger frog (*Hoplobatrachus chinensis*) tadpoles. *Dong wu xue yan jiu = Zoological research*. 2014;35(4):272-9.

Wei Q, Zhan L, Juanjuan B, Jing W, Jianjun W, Taoli S, et al. Biodistribution of co-exposure to multi-walled carbon nanotubes and nanodiamonds in mice. *Nanoscale research letters*. 2012;7(1):473.

Wei S, Wang FH, Chen YJ, Lan T, Zhang ST. The joint toxicity effect of five antibiotics and dibutyl phthalate to luminescent bacteria (*Vibrio fischeri*). *Environmental Science and Pollution Research*. 2018;25(26):26504-11.

Weitzman ER, Magane KM, Wisk LE, Allario J, Harstad E, Levy S. Alcohol Use and Alcohol-Interactive Medications Among Medically Vulnerable Youth. *Pediatrics*. 2018;142(4).

Welder AA, O'Dell JF, Melchert RB, Eselin JA. Evaluation of the combined toxic effects of cocaine and ethanol on primary myocardial cell cultures. *Toxicology in vitro : an international journal published in association with BIBRA*. 1991;5(3):247-55.

Weltje L. Mixture toxicity and tissue interactions of Cd, Cu, Pb and Zn in earthworms (*Oligochaeta*) in laboratory and field soils: a critical evaluation of data. *Chemosphere*. 1998;36(12):2643-60.

Wen B, Jin SR, Chen ZZ, Gao JZ, Liu YN, Liu JH, et al. Single and combined effects of microplastics and cadmium on the cadmium accumulation, antioxidant defence and innate immunity of the discus fish (*Symphysodon aequifasciatus*). *Environmental Pollution*. 2018;243:462-71.

Wen B, Zhang N, Jin SR, Chen ZZ, Gao JZ, Liu Y, et al. Microplastics have a more profound impact than elevated temperatures on the predatory performance, digestion and energy metabolism of an Amazonian cichlid. *Aquatic Toxicology*. 2018;195:67-76.

Wen H, Yuan L, Wei C, Zhao Y, Qian Y, Ma P, et al. Effects of combined exposure to formaldehyde and benzene on immune cells in the blood and spleen in Balb/c mice. *Environmental toxicology and pharmacology*. 2016;45:265-73.

Wen J, Zeng GM. Chemical and biological assessment of Cd-polluted sediment for land use: The effect of stabilization using chitosan-coated zeolite. *Journal of Environmental Management*. 2018;212:46-53.

Wen X, Liu ZH, Lei XH, Lin RJ, Fang GH, Tan QF, et al. Future changes in Yuan River ecohydrology: Individual and cumulative impacts of climates change and cascade hydropower development on runoff and aquatic habitat quality. *Science of the Total Environment*. 2018;633:1403-17.

Wen Y, Zhang L, Chen Z, Sheng X, Qiu J, Xu D. Co-exposure of silver nanoparticles and chiral herbicide imazethapyr to *Arabidopsis thaliana*: Enantioselective effects. *Chemosphere*. 2016;145:207-14.

Wetmore BA, Struve MF, Gao P, Sharma S, Allison N, Roberts KC, et al. Genotoxicity of intermittent co-exposure to benzene and toluene in male CD-1 mice. *Chemico-biological interactions*. 2008;173(3):166-78.

Weyns M, Koppen C, Tassignon M-J. Scleral contact lenses as an alternative to tarsorrhaphy for the long-term management of combined exposure and neurotrophic keratopathy. *Cornea*. 2013;32(3):359-61.

Whitby KE, Collins TF, Welsh JJ, Black TN, Flynn T, Shackelford M, et al. Developmental effects of combined exposure to ethanol and vitamin A. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 1994;32(4):305-20.

White L, Donohue I, Emmerson MC, O'Connor NE. Combined effects of warming and nutrients on marine communities are moderated by predators and vary across functional groups. *Global Change Biology*. 2018;24(12):5853-66.

Whitford V, Joanisse MF. Do eye movements reveal differences between monolingual and bilingual children's first-language and second-language reading? A focus on word frequency effects. *Journal of Experimental Child Psychology*. 2018;173:318-37.

Wigaeus E, Lof A, Nordqvist MB. Uptake, distribution, metabolism, and elimination of styrene in man. A comparison between single exposure and co-exposure with acetone. *British journal of industrial medicine*. 1984;41(4):539-46.

Wigal T, Amsel A. Behavioral and neuroanatomical effects of prenatal, postnatal, or combined exposure to ethanol in weanling rats. *Behavioral neuroscience*. 1990;104(1):116-26.

Wild B, Ambus P, Reinsch S, Richter A. Resistance of soil protein depolymerization rates to eight years of elevated CO₂, warming, and summer drought in a temperate heathland. *Biogeochemistry*. 2018;140(3):255-67.

Wildemann TM, Weber LP, Siciliano SD. Combined exposure to lead, inorganic mercury and methylmercury shows deviation from additivity for cardiovascular toxicity in rats. *Journal of applied toxicology : JAT*. 2015;35(8):918-26.

Wildman JM, Freedman ML, Rosman J, Goldstein B. Benzene and lead inhibition of rabbit reticulocyte heme and protein synthesis: evidence for additive toxicity of these two components of commercial gasoline. *Research communications in chemical pathology and pharmacology*. 1976;13(3):473-88.

Wilkinson AD, Collier CJ, Flores F, Negri AP. Acute and additive toxicity of ten photosystem-II herbicides to seagrass. *Scientific reports*. 2015;5:17443.

Wilpart M, Mainguet P, Maskens A, Roberfroid M. Mutagenicity of 1,2-dimethylhydrazine towards *Salmonella typhimurium*, co-mutagenic effect of secondary biliary acids. *Carcinogenesis*. 1983;4(1):45-8.

Wilson A, Zigler CM, Patel CJ, Dominici F. Model-averaged confounder adjustment for estimating multivariate exposure effects with linear regression. *Biometrics*. 2018;74(3):1034-44.

Windemuller FJ, Ettema JH. Effects of combined exposure to trichloroethylene and alcohol on mental capacity. *International archives of occupational and environmental health*. 1978;41(2):77-85.

Wisniewska-Knypl JM, Wronska-Nofer T, Jajte J, Jedlinska U. The effect of combined exposures to ethanol and xylene on rat hepatic microsomal monooxygenase activities. *Alcohol (Fayetteville, NY)*. 1989;6(5):347-52.

Wisniewska-Knypl JM, Wronska-Nofer T. Induction of cytochrome P-450 monooxygenase after combined exposure of rats to xylene and ethanol. *Folia medica Cracoviensia*. 1990;31(3):185-92.

Woelflingseder L, Del Favero G, Blazeovic T, Heiss EH, Haider M, Warth B, et al. Impact of glutathione modulation on the toxicity of the *Fusarium* mycotoxins deoxynivalenol (DON), NX-3 and butenolide in human liver cells. *Toxicology Letters*. 2018;299:104-17.

Wojciechowski AM, Karadas M, Huck A, Osterkamp C, Jankuhn S, Meijer J, et al. Contributed Review: Camera-limits for wide-field magnetic resonance imaging with a nitrogen-vacancy spin sensor. *Review of Scientific Instruments*. 2018;89(3).

Wolff NH, Masuda YJ, Meijaard E, Wells JA, Game ET. Impacts of tropical deforestation on local temperature and human wellbeing perceptions. *Global Environmental Change-Human and Policy Dimensions*. 2018;52:181-9.

Wolt JD. A mixture toxicity approach for environmental risk assessment of multiple insect resistance genes. *Environmental toxicology and chemistry*. 2011;30(3):763-72.

Wong EM, Walby WF, Wilson DW, Tablin F, Schelegle ES. Ultrafine Particulate Matter Combined With Ozone Exacerbates Lung Injury in Mature Adult Rats With Cardiovascular Disease. *Toxicological sciences : an official journal of the Society of Toxicology*. 2018;163(1):140-51.

Woo HD, Kim BM, Kim YJ, Lee YJ, Kang SJ, Cho YH, et al. Quercetin prevents necrotic cell death induced by co-exposure to benzo(a)pyrene and UVA radiation. *Toxicology in vitro : an international journal published in association with BIBRA*. 2008;22(8):1840-5.

Wooding D, Syberg-Olsen M, Yuen A, Carlsten C. Co-Exposure to Diesel Exhaust and Allergen Impairs Lung Function and Induces Local and Systemic Inflammation. *American Journal of Respiratory and Critical Care Medicine*. 2018;197.

Wraith D, Mengersen K. Assessing the combined effect of asbestos exposure and smoking on lung cancer: a Bayesian approach. *Statistics in medicine*. 2007;26(5):1150-69.

Wronska-Nofer T, Klimczak J, Wisniewska-Knypl JM, Jajte J, Opalska B. Combined effect of ethanol and carbon disulphide on cytochrome P-450 monooxygenase, lipid peroxidation and ultrastructure of the liver in chronically exposed rats. *Journal of applied toxicology : JAT*. 1986;6(4):297-302.

Wu B, Liu Z, Xu Y, Li D, Li M. Combined toxicity of cadmium and lead on the earthworm *Eisenia fetida* (Annelida, Oligochaeta). *Ecotoxicology and environmental safety*. 2012;81:122-6.

Wu B, Wu JL, Liu S, Shen ZY, Chen L, Zhang XX, et al. Combined effects of graphene oxide and zinc oxide nanoparticle on human A549 cells: bioavailability, toxicity and mechanisms. *Environmental Science-Nano*. 2019;6(2):635-45.

Wu CQ, Gao YN, Li SL, Huang X, Bao XY, Wang JQ, et al. Modulation of intestinal epithelial permeability and mucin mRNA (MUC2, MUC5AC, and MUC5B) expression and protein secretion in Caco-2/HT29-MTX co-cultures exposed to aflatoxin M1, ochratoxin A, and zearalenone individually or collectively. *Toxicology Letters*. 2019;309:1-9.

Wu F, Fu Z, Liu B, Mo C, Chen B, Corns W, et al. Health risk associated with dietary co-exposure to high levels of antimony and arsenic in the world's largest antimony mine area. *The Science of the total environment*. 2011;409(18):3344-51.

Wu FL, Cui SK, Sun M, Xie Z, Huang W, Huang XZ, et al. Combined effects of ZnO NPs and seawater acidification on the haemocyte parameters of thick shell mussel &ITMytilus coruscus&IT. *Science of the Total Environment*. 2018;624:820-30.

Wu J, Shi Y, Asweto CO, Feng L, Yang X, Zhang Y, et al. Co-exposure to amorphous silica nanoparticles and benzo a pyrene at low level in human bronchial epithelial BEAS-2B cells. *Environmental science and pollution research international*. 2016;23(22):23134-44.

Wu MQ, Liang G, Duan HL, Yang XF, Qin GH, Sang N. Synergistic effects of sulfur dioxide and polycyclic aromatic hydrocarbons on pulmonary pro-fibrosis via mir-30c-1-3p/transforming growth factor beta type II receptor axis. *Chemosphere*. 2019;219:268-76.

Wu MT, Lin PC, Pan CH, Peng CY. Risk assessment of personal exposure to polycyclic aromatic hydrocarbons and aldehydes in three commercial cooking workplaces. *Scientific Reports*. 2019;9.

Wu NJ, Fu GL, Yang Y, Xia MF, Yun H, Wang QG. Fire safety enhancement of a highly efficient flame retardant poly (phenylphosphoryl phenylenediamine) in biodegradable poly(lactic acid). *Journal of Hazardous Materials*. 2019;363:1-9.

Wu QH, Du YM, Huang ZY, Gu JD, Leung JYS, Mai BX, et al. Vertical profile of soil/sediment pollution and microbial community change by e-waste recycling operation. *Science of the Total Environment*. 2019;669:1001-10.

Wu S, Lei L, Liu M, Song Y, Lu S, Li D, et al. Single and mixture toxicity of strobilurin and SDHI fungicides to *Xenopus tropicalis* embryos. *Ecotoxicology and environmental safety*. 2018;153:8-15.

Wu SG, Hu GJ, Zhao XP, Wang Q, Jiang JH. Synergistic potential of fenvalerate and triadimefon on endocrine disruption and oxidative stress during rare minnow embryo development. *Environmental Toxicology*. 2018;33(7):759-69.

Wu SG, Li XF, Liu XJ, Yang GL, An XH, Wang Q, et al. Joint toxic effects of triazophos and imidacloprid on zebrafish (*Danio rerio*). *Environmental Pollution*. 2018;235:470-81.

Wu SY, Lei LL, Liu MT, Song Y, Lu SB, Li D, et al. Single and mixture toxicity of strobilurin and SDHI fungicides to *Xenopus tropicalis* embryos. *Ecotoxicology and Environmental Safety*. 2018;153:8-15.

Wu W, Zhang K, Jiang S, Liu D, Zhou H, Zhong R, et al. Association of co-exposure to heavy metals with renal function in a hypertensive population. *Environment international*. 2018;112:198-206.

Wu WX, Zhang K, Jiang SL, Liu DY, Zhou H, Zhong R, et al. Association of co-exposure to heavy metals with renal function in a hypertensive population. *Environment International*. 2018;112:198-206.

Wu XH, Wang W, Xie KJ, Yin CM, Hou HJ, Xie XL. Combined effects of straw and water management on CH₄ emissions from rice fields. *Journal of Environmental Management*. 2019;231:1257-62.

Wyatt TA, Sisson JH, Allen-Gipson DS, McCaskill ML, Boten JA, DeVasure JM, et al. Co-exposure to cigarette smoke and alcohol decreases airway epithelial cell cilia beating in a protein kinase Cepsilon-dependent manner. *The American journal of pathology*. 2012;181(2):431-40.

Xia B, Sui Q, Sun XM, Han Q, Chen BJ, Zhu L, et al. Ocean acidification increases the toxic effects of TiO₂ nanoparticles on the marine microalga *Chlorella vulgaris*. *Journal of Hazardous Materials*. 2018;346:1-9.

Xia S, Zhu P, Pi F, Zhang Y, Li Y, Wang J, et al. Development of a simple and convenient cell-based electrochemical biosensor for evaluating the individual and combined toxicity of DON, ZEN, and AFB₁. *Biosensors & bioelectronics*. 2017;97:345-51.

Xiao WD, Ye XZ, Zhang Q, Chen D, Hu J, Gao N. Evaluation of cadmium transfer from soil to leafy vegetables: Influencing factors, transfer models, and indication of soil threshold contents. *Ecotoxicology and Environmental Safety*. 2018;164:355-62.

Xie DH, Tan Y, Chu A, Zhou TY, van Maanen B. Distribution Characteristics of the Extreme Storm Tides in the Radial Sand Ridges Area of the South Yellow Sea in China. *Journal of Coastal Research*. 2018:856-60.

Xie J, Yang D, Sun X, Cao R, Chen L, Wang Q, et al. Individual and Combined Toxicities of Benzo a pyrene and 2,2',4,4'-Tetrabromodiphenyl Ether on Early Life Stages of the Pacific Oyster, *Crassostrea gigas*. *Bulletin of environmental contamination and toxicology*. 2017;99(5):582-8.

Xie MD, Sun YX, Feng JF, Gao YF, Zhu L. Predicting the toxic effects of Cu and Cd on *Chlamydomonas reinhardtii* with a DEBtox model. *Aquatic Toxicology*. 2019;210:106-16.

Xin XY, Huang G, An CJ, Raina-Fulton R, Weger H. Insights into Long-Term Toxicity of Triclosan to Freshwater Green Algae in Lake Erie. *Environmental Science & Technology*. 2019;53(4):2189-98.

Xing BS, Jin RC. Inhibitory effects of heavy metals and antibiotics on nitrifying bacterial activities in mature partial nitrification. *Chemosphere*. 2018;200:437-45.

Xing CX, Zhao Q, Hu ZM, Liu YQ. Direct Observations and Modeling of Summertime Coastal Circulation Patterns in the Western Bohai Sea. *Journal of Coastal Research*. 2018;34(2):373-82.

Xing L, Sun J, Liu H, Yu H. Combined toxicity of three chlorophenols 2,4-dichlorophenol, 2,4,6-trichlorophenol and pentachlorophenol to *Daphnia magna*. *Journal of environmental monitoring : JEM*. 2012;14(6):1677-83.

Xing Y, Luo J, Zhang J, Li B, Gong X, Liu Z, et al. Effects of single and combined exposures to copper and benzotriazole on *Eisenia fetida*. *Chemosphere*. 2017;186:108-15.

Xing YS, Meng XS, Wang L, Zhang JJ, Wu ZJ, Gong XY, et al. Effects of benzotriazole on copper accumulation and toxicity in earthworm (*Eisenia fetida*). *Journal of Hazardous Materials*. 2018;351:330-6.

Xiong JQ, Kim SJ, Kurade MB, Govindwar S, Abou-Shanab RAI, Kim JR, et al. Combined effects of sulfamethazine and sulfamethoxazole on a freshwater microalga, *Scenedesmus obliquus*: toxicity, biodegradation, and metabolic fate. *Journal of Hazardous Materials*. 2019;370:138-46.

Xiong X, Allinson G, Stagnitti F, Murray F, Wang X, Liang R, et al. Effects of simultaneous exposure to atmospheric sulfur dioxide and heavy metals on the yield and metal content of soybean grain (*Glycine max* L. Merr.). *Bulletin of environmental contamination and toxicology*. 2003;71(5):1005-10.

Xu CH, Luo ZJ, Li Z. SIMULATION AND PREDICTION OF LAND SUBSIDENCE CAUSED BY THE COMBINED EFFECTS OF GROUNDWATER EXPLOITATION AND HIGH-RISE BUILDING LOADS. *Fresenius Environmental Bulletin*. 2018;27(10):6547-59.

Xu DM, Rao GW. Joint effect of co-exposure of Cu and chlorpyrifos on the toxicity of earthworm. *Ying yong sheng tai xue bao = The journal of applied ecology*. 2016;27(9):3029-34.

Xu D-m, Wang Y-h, Wang N, Rao G-w. Effects of single and co-exposure of Cu and chlorpyrifos on the toxicity of earthworm. *Huan jing ke xue= Huanjing kexue*. 2015;36(1):280-5.

Xu DM, Zhang JQ, Yan B, Liu H, Zhang LL, Zhan CL, et al. Contamination characteristics and potential environmental implications of heavy metals in road

dusts in typical industrial and agricultural cities, southeastern Hubei Province, Central China. *Environmental Science and Pollution Research*. 2018;25(36):36223-38.

Xu H-y, Chen R-r, Cai X-y, He D-f. Effects of co-exposure to paraquat and maneb on system of substantia nigra and striatum in rats. *Zhonghua lao dong wei sheng zhi ye bing za zhi* = *Zhonghua laodong weisheng zhiyebing zazhi* = Chinese journal of industrial hygiene and occupational diseases. 2011;29(1):33-8.

Xu LJ, Shen SQ, Li L, Chen TT, Zhan ZY, Ou CQ. A tensor product quasi-Poisson model for estimating health effects of multiple ambient pollutants on mortality. *Environmental Health*. 2019;18.

Xu MY, Wang P, Sun YJ, Wu YJ. Disruption of Kidney Metabolism in Rats after Subchronic Combined Exposure to Low-Dose Cadmium and Chlorpyrifos. *Chemical Research in Toxicology*. 2019;32(1):122-9.

Xu M-Y, Wang P, Sun Y-J, Yang L, Wu Y-J. Joint toxicity of chlorpyrifos and cadmium on the oxidative stress and mitochondrial damage in neuronal cells. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2017;103:246-52.

Xu N, Chen P, Liu L, Zeng Y, Zhou H, Li S. Effects of combined exposure to 17 α -ethynylestradiol and dibutyl phthalate on the growth and reproduction of adult male zebrafish (*Danio rerio*). *Ecotoxicology and environmental safety*. 2014;107:61-70.

Xu W, Vebrosky EN, Richards ML, Armbrust KL. Evaluation of dicloran phototoxicity using primary cardiomyocyte culture from *Crassostrea virginica*. *Science of the Total Environment*. 2018;628-629:1-10.

Xu X, Chiung YM, Lu F, Qiu S, Ji M, Huo X. Associations of cadmium, bisphenol A and polychlorinated biphenyl co-exposure in utero with placental gene expression and neonatal outcomes. *Reproductive toxicology (Elmsford, NY)*. 2015;52:62-70.

Xu X, Liu J, Huang C, Lu F, Chiung YM, Huo X. Association of polycyclic aromatic hydrocarbons (PAHs) and lead co-exposure with child physical growth and development in an e-waste recycling town. *Chemosphere*. 2015;139:295-302.

Xu X, Rao X, Wang T-Y, Jiang SY, Ying Z, Liu C, et al. Effect of co-exposure to nickel and particulate matter on insulin resistance and mitochondrial dysfunction in a mouse model. *Particle and fibre toxicology*. 2012;9:40.

Xu XM, Cui ZJ, Wang SS. Joint toxicity on hepatic detoxication enzymes in goldfish (*Carassius auratus*) exposed to binary mixtures of lead and paraquat. *Environmental Toxicology and Pharmacology*. 2018;62:60-8.

Xu Y-B, Xu J-X, Chen J-L, Huang L, Zhou S-Q, Zhou Y, et al. Antioxidative responses of *Pseudomonas fluorescens* YZ2 to simultaneous exposure of Zn and Cefradine. *Ecotoxicology* (London, England). 2015;24(7-8):1788-97.

Xu Y-B, Zhou Y, Ruan J-J, Xu S-H, Gu J-D, Huang S-S, et al. Endogenous nitric oxide in *Pseudomonas fluorescens* ZY2 as mediator against the combined exposure to zinc and cefradine. *Ecotoxicology* (London, England). 2015;24(4):835-43.

Xu YQ, Liu SS, Fan Y, Li K. Toxicological interaction of multi-component mixtures to *Vibrio qinghaiensis* sp.-Q67 induced by at least three components. *Science of the Total Environment*. 2018;635:432-42.

Xu YQ, Liu SS, Li K, Wang ZJ, Xiao QF. Polyethylene glycol 400 significantly enhances the stimulation of 2-phenoxyethanol on *Vibrio qinghaiensis* sp.-Q67 bioluminescence. *Ecotoxicology and Environmental Safety*. 2019;171:240-6.

Xu YQ, Liu SS, Wang ZJ, Li K, Qu R. Commercial personal care product mixtures exhibit hormetic concentration-responses to *Vibrio qinghaiensis* sp.-Q67. *Ecotoxicology and Environmental Safety*. 2018;162:304-11.

Xu YS, Liu XW, Wang H, Zeng XP, Zhang YF, Han JK, et al. Influences of In-Furnace Kaolin Addition on the Formation and Emission Characteristics of PM_{2.5} in a 1000 MW Coal-Fired Power Station. *Environmental Science & Technology*. 2018;52(15):8718-24.

Xue L, Prass N, Gollnow S, Davis J, Scherhauser S, Ostergren K, et al. Efficiency and Carbon Footprint of the German Meat Supply Chain. *Environmental Science & Technology*. 2019;53(9):5133-42.

Yabalak E, Gormez O, Gizir AM. Subcritical water oxidation of protham by H₂O₂ using response surface methodology (RSM). *Journal of Environmental Science and Health Part B-Pesticides Food Contaminants and Agricultural Wastes*. 2018;53(5):334-9.

Yadav M, Sahu SP, Singh NK. Multivariate statistical assessment of ambient air pollution in two coalfields having different coal transportation strategy: A

comparative study in Eastern India. *Journal of Cleaner Production*. 2019;207:97-110.

Yalcin S, Leroux SJ. An empirical test of the relative and combined effects of land-cover and climate change on local colonization and extinction. *Global Change Biology*. 2018;24(8):3849-61.

Yamakawa M, Niibe H, Honjo J, Kazumoto T, Akimoto T, Furuta M, et al. Experimental studies on the combined effect of radiation and UFT 1. Radiosensitizing effect of UFT under single X-ray exposure. *Gan to kagaku ryoho Cancer & chemotherapy*. 1989;16(10):3443-7.

Yan J, Lin B, Hu C, Zhang H, Lin Z, Xi Z. The combined toxicological effects of titanium dioxide nanoparticles and bisphenol A on zebrafish embryos. *Nanoscale research letters*. 2014;9(1):406.

Yan L, Feng M, Liu J, Wang L, Wang Z. Antioxidant defenses and histological changes in *Carassius auratus* after combined exposure to zinc and three multi-walled carbon nanotubes. *Ecotoxicology and environmental safety*. 2016;125:61-71.

Yan R, Cai YP, Li CH, Wang X, Liu Q. Hydrological Responses to Climate and Land Use Changes in a Watershed of the Loess Plateau, China. *Sustainability*. 2019;11(5).

Yan SL, Wang ZH, Mong MC, Yang YC, Yin MC. Combination of carnosine and asiatic acid provided greater anti-inflammatory protection for HUVE cells and diabetic mice than individual treatments of carnosine or asiatic acid alone. *Food and Chemical Toxicology*. 2019;126:192-8.

Yan Z, Li X, Chen J, Tam NF-Y. Combined toxicity of cadmium and copper in *Avicennia marina* seedlings and the regulation of exogenous jasmonic acid. *Ecotoxicology and environmental safety*. 2015;113:124-32.

Yan ZH, Liu YX, Sun HW, Lu GH. Influence of multiwall carbon nanotubes on the toxicity of 17 beta-estradiol in the early life stages of zebrafish. *Environmental Science and Pollution Research*. 2018;25(8):7566-74.

Yancey CB, Hegarty BC, Qurollo BA, Levy MG, Birkenheuer AJ, Weber DJ, et al. Regional seroreactivity and vector-borne disease co-exposures in dogs in the United States from 2004-2010: utility of canine surveillance. *Vector borne and zoonotic diseases (Larchmont, NY)*. 2014;14(10):724-32.

Yang F, Yan CZ. Influence of titanium dioxide nanoparticles on the toxicity of arsenate in *Nannochloropsis maritima*. *Chemosphere*. 2018;209:191-200.

Yang G, Chen C, Wang Y, Cai L, Kong X, Qian Y, et al. Joint toxicity of chlorpyrifos, atrazine, and cadmium at lethal concentrations to the earthworm *Eisenia fetida*. *Environmental science and pollution research international*. 2015;22(12):9307-15.

Yang G, Chen C, Wang Y, Peng Q, Zhao H, Guo D, et al. Mixture toxicity of four commonly used pesticides at different effect levels to the epigeic earthworm, *Eisenia fetida*. *Ecotoxicology and environmental safety*. 2017;142:29-39.

Yang GL, Chen C, Yu YJ, Zhao HY, Wang W, Wang YH, et al. Combined effects of four pesticides and heavy metal chromium (VI) on the earthworm using avoidance behavior as an endpoint. *Ecotoxicology and Environmental Safety*. 2018;157:191-200.

Yang HB, Zhao YZ, Tang Y, Gong HQ, Guo F, Sun WH, et al. Antioxidant defence system is responsible for the toxicological interactions of mixtures: A case study on PFOS and PFOA in *Daphnia magna*. *Science of the Total Environment*. 2019;667:435-43.

Yang JH, Zhang H, Zhang ZQ, Lai B. Degradation of 2,4-Dinitrophenol in Aqueous Solution by Microscale Fe-0/H₂O₂/O₃ Process. *Environmental Engineering Science*. 2019;36(2):207-18.

Yang JJ, Ju LS, Yang CY, Xue JH, Setlow B, Morey TE, et al. Effects of combined brief etomidate anesthesia and postnatal stress on amygdala expression of Cl⁻ cotransporters and corticotropin-releasing hormone and alcohol intake in adult rats. *Neuroscience Letters*. 2018;685:83-9.

Yang JS, Kim EA, Lee MY, Park IJ, Kang SK. Biological monitoring of occupational exposure to N,N-dimethylformamide--the effects of co-exposure to toluene or dermal exposure. *International archives of occupational and environmental health*. 2000;73(7):463-70.

Yang M, Wang XR. Interactions between *Microcystis aeruginosa* and coexisting bisphenol A at different phosphorus levels. *Science of the Total Environment*. 2019;658:439-48.

Yang M, Zhao YX, Yang HM, Shen YY, Zhang XY. Suppression of weeds and weed seeds in the soil by stubbles and no-tillage in an arid maize-winter wheat-common vetch rotation on the Loess Plateau of China. *Journal of Arid Land*. 2018;10(5):809-20.

Yang RS. Some current approaches for studying combination toxicology in chemical mixtures. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 1996;34(11-12):1037-44.

Yang X, Feng L, Zhang Y, Hu H, Shi Y, Liang S, et al. Co-exposure of silica nanoparticles and methylmercury induced cardiac toxicity in vitro and in vivo. *The Science of the total environment*. 2018;631-632:811-21.

Yang X, Liu W, Lin H, Zeng H, Zhang R, Pu C, et al. Interaction Effects of AFB1 and MC-LR Co-exposure with Polymorphism of Metabolic Genes on Liver Damage: focusing on SLC1B1 and GSTP1. *Scientific reports*. 2017;7(1):16164.

Yang XZ, Feng L, Zhang YN, Hu HJ, Shi YF, Liang S, et al. Co-exposure of silica nanoparticles and methylmercury induced cardiac toxicity in vitro and in vivo. *Science of the Total Environment*. 2018;631-632:811-21.

Yang Y, Fang HB, Roy A, Tan M. Adaptive oncology phase I trial design of drug combinations with drug-drug interaction modeling. *Statistics and Its Interface*. 2018;11(1):109-27.

Yang Y, Ma H, Zhou J, Liu J, Liu W. Joint toxicity of permethrin and cypermethrin at sublethal concentrations to the embryo-larval zebrafish. *Chemosphere*. 2014;96:146-54.

Yang Z, Guo H, Yao ZK, Mei Y, Tang CY. Hydrophilic Silver Nanoparticles Induce Selective Nanochannels in Thin Film Nanocomposite Polyamide Membranes. *Environmental Science & Technology*. 2019;53(9):5301-8.

Yazar S, Yildirim IY. OXIDATIVE DNA DAMAGE IN ELECTROPLATERS CO-EXPOSED TO CHROMIUM AND NICKEL. *Fresenius Environmental Bulletin*. 2018;27(10):6831-6.

Yazdanbakhsh AR, Rafiee M, Daraei H, Amoozegar MA. Responses of flocculated activated sludge to bimetallic Ag-Fe nanoparticles toxicity: Performance, activity enzymatic, and bacterial community shift. *Journal of Hazardous Materials*. 2019;366:114-23.

Ye N, Wang Z, Wang S, Peijnenburg W. Toxicity of mixtures of zinc oxide and graphene oxide nanoparticles to aquatic organisms of different trophic level: particles outperform dissolved ions. *Nanotoxicology*. 2018;12(5):423-38.

Ye XC, Meng YK, Xu LG, Xu CY. Net primary productivity dynamics and associated hydrological driving factors in the floodplain wetland of China's largest freshwater lake. *Science of the Total Environment*. 2019;659:302-13.

Yeager RL, Franzosa JA, Millsap DS, Lim J, Hansen CM, Jasevicius AV, et al. Brief report: embryonic growth and hatching implications of developmental 670-nm phototherapy and dioxin co-exposure. *Photomedicine and laser surgery*. 2006;24(3):410-3.

Yeager RL, Franzosa JA, Millsap DS, Lim J, Heise SS, Wakhungu P, et al. Survivorship and mortality implications of developmental 670-nm phototherapy: dioxin co-exposure. *Photomedicine and laser surgery*. 2006;24(1):29-32.

Yee SB, Hanumegowda UM, Copple BL, Shibuya M, Ganey PE, Roth RA. Endothelial cell injury and coagulation system activation during synergistic hepatotoxicity from monocrotaline and bacterial lipopolysaccharide coexposure. *Toxicological sciences : an official journal of the Society of Toxicology*. 2003;74(1):203-14.

Yee SB, Kinser S, Hill DA, Barton CC, Hotchkiss JA, Harkema JR, et al. Synergistic hepatotoxicity from coexposure to bacterial endotoxin and the pyrrolizidine alkaloid monocrotaline. *Toxicology and applied pharmacology*. 2000;166(3):173-85.

Yesiller N, Hanson JL, Sohn AH, Bogner JE, Blake DR. Spatial and Temporal Variability in Emissions of Fluorinated Gases from a California Landfill. *Environmental Science & Technology*. 2018;52(12):6789-97.

Yi X, Bao VWW, Leung KMY. Binary mixture toxicities of triphenyltin with tributyltin or copper to five marine organisms: Implications on environmental risk assessment. *Marine pollution bulletin*. 2017;124(2):839-46.

Yin Q, Wang JF. A better indicator to measure the effects of meteorological factors on cardiovascular mortality: heat index. *Environmental Science and Pollution Research*. 2018;25(23):22842-9.

Yin QJ, Wang WX. Multiple trace element accumulation in the mussel *Septifer virgatus*: Counteracting effects of salinity on uptake and elimination. *Environmental Pollution*. 2018;242:375-82.

Yokoro K, Niwa O, Hamada K, Kamiya K, Seyama T, Inoh A. Carcinogenic and co-carcinogenic effects of radiation in rat mammary carcinogenesis and mouse T-cell lymphomagenesis: a review. *International journal of radiation biology and related studies in physics, chemistry, and medicine*. 1987;51(6):1069-80.

Yoo J, Lim YM, Kim H, Kim EJ, Lee DH, Lee B, et al. Potentiation of Sodium Metabisulfite Toxicity by Propylene Glycol in Both in Vitro and in Vivo Systems. *Frontiers in Pharmacology*. 2018;9.

Yoon JH, Wang SYS, Lo MH, Wu WY. Concurrent increases in wet and dry extremes projected in Texas and combined effects on groundwater. *Environmental Research Letters*. 2018;13(5).

Yoshida M, Lee JY, Satoh M, Watanabe C. Neurobehavioral effects of postnatal exposure to low-level mercury vapor and/or methylmercury in mice. *Journal of Toxicological Sciences*. 2018;43(1-3):11-7.

Younes M, Aggett P, Aguilar F, Crebelli R, Di Domenico A, Dusemund B, et al. Re-evaluation of celluloses E 460(i), E 460(ii), E 461, E 462, E 463, E 464, E 465, E 466, E 468 and E 469 as food additives. *Efsa Journal*. 2018;16(1).

Younes M, Aquilina G, Castle L, Engel KH, Fowler P, Fernandez MJF, et al. Re-evaluation of propane-1,2-diol esters of fatty acids (E 477) as a food additive. *Efsa Journal*. 2018;16(12).

Young JTF, Gauley J, Heikkila JJ. Simultaneous exposure of *Xenopus* A6 kidney epithelial cells to concurrent mild sodium arsenite and heat stress results in enhanced hsp30 and hsp70 gene expression and the acquisition of thermotolerance. *Comparative biochemistry and physiology Part A, Molecular & integrative physiology*. 2009;153(4):417-24.

Younoussa A, Wan YN, Yu Y, Wang Q, Li HF. Effect of selenium on uptake and translocation of arsenic in rice seedlings (*Oryza sativa* L.). *Ecotoxicology and Environmental Safety*. 2018;148:869-75.

Yousef MI, Abuzreda AA, Kamel MA. Neurotoxicity and inflammation induced by individual and combined exposure to iron oxide nanoparticles and silver nanoparticles. *Journal of Taibah University for Science*. 2019;13(1):570-8.

Yu HY, Park Y-S, Son Y-J. Combined effect of left ventricular ejection fraction and post-cardiac depressive symptoms on major adverse cardiac events after successful primary percutaneous coronary intervention: a 12-month follow-up. *European journal of cardiovascular nursing : journal of the Working Group on Cardiovascular Nursing of the European Society of Cardiology*. 2017;16(1):37-45.

Yu J, Xu EG, Ren Y, Jin S, Zhang T, Liu J, et al. Mixture Toxicity of Bensulfuron-Methyl and Acetochlor to Red Swamp Crayfish (*Procambarus clarkii*): Behavioral, Morphological and Histological Effects. *International journal of environmental research and public health*. 2017;14(12).

Yu J, Yang XS, Yang XF, Yang MX, Wang P, Yang Y, et al. Nonylphenol aggravates nonalcoholic fatty liver disease in high sucrose-high fat diet-treated rats. *Scientific Reports*. 2018;8.

Yu K, Doherty AH, Genik PC, Gookin SE, Roteliuk DM, Wojda SJ, et al. Mimicking the effects of spaceflight on bone: Combined effects of disuse and chronic low-dose rate radiation exposure on bone mass in mice. *Life sciences in space research*. 2017;15:62-8.

Yu KN, Guan ZJ, Young EC, Stokes MJ. Measurement of tracheobronchial dose from simultaneous exposure to environmental radon and thoron progeny. *Health physics*. 1998;75(2):153-8.

Yu R, Zhai PM, Chen Y. Facing climate change-related extreme events in megacities of China in the context of 1.5 degrees C global warming. *Current Opinion in Environmental Sustainability*. 2018;30:75-81.

Yu XJ, Tian XF, Lu YY, Liu ZG, Guo YL, Chen JQ, et al. Combined effects of straw-derived biochar and bio-based polymer-coated urea on nitrogen use efficiency and cotton yield. *Chemical Speciation and Bioavailability*. 2018;30(1):112-22.

Yu Y, Choi YH, Choi J, Choi S, Maeng SK. Multi-barrier approach for removing organic micropollutants using mobile water treatment systems. *Science of the Total Environment*. 2018;639:331-8.

Yu Y, Duan J, Li Y, Yu Y, Jin M, Li C, et al. Combined toxicity of amorphous silica nanoparticles and methylmercury to human lung epithelial cells. *Ecotoxicology and environmental safety*. 2015;112:144-52.

Yu YJ, Ma RX, Yu L, Cai Z, Li HY, Zuo Y, et al. Combined effects of cadmium and tetrabromobisphenol a (TBBPA) on development, antioxidant enzymes activity and thyroid hormones in female rats. *Chemico-Biological Interactions*. 2018;289:23-31.

Yu YJ, Zhu XH, Li LZ, Lin BG, Xiang MD, Zhang XH, et al. Health implication of heavy metals exposure via multiple pathways for residents living near a former e-waste recycling area in China: A comparative study. *Ecotoxicology and Environmental Safety*. 2019;169:178-84.

Yu Z, Hao R, Zhang L, Zhu Y. Effects of TiO₂, SiO₂, Ag and CdTe/CdS quantum dots nanoparticles on toxicity of cadmium towards *Chlamydomonas reinhardtii*. *Ecotoxicology and Environmental Safety*. 2018;156:75-86.

Yuan G, Dai S, Yin Z, Lu H, Shu Y, Wang C. Combined effects of sub-chronic exposure to lead and cadmium on physiological and biochemical indexes of blood in SD rats. *Wei sheng yan jiu = Journal of hygiene research*. 2014;43(2):259-64.

Yuan KY, Li F, Yang HJ, Wang YM. The Influence of Land Use Change on Ecosystem Service Value in Shangzhou District. *International Journal of Environmental Research and Public Health*. 2019;16(8).

Yuan SW, Huang C, Ji XY, Ma M, Rao KF, Wang ZJ. Prediction of the combined effects of multiple estrogenic chemicals on MCF-7 human breast cancer cells and a preliminary molecular exploration of the estrogenic proliferative effects and related gene expression. *Ecotoxicology and Environmental Safety*. 2018;160:1-9.

Yuan WB, Gao G, Shi Q, Xu ZG, Wu HY. Combined effects of ocean acidification and warming on physiological response of the diatom *Thalassiosira pseudonana* to light challenges. *Marine Environmental Research*. 2018;135:63-9.

Yuan X, Lu G, Zhao J. QSAR study on the joint toxicity of 2,4-dinitrotoluene with aromatic compounds to *Vibrio fischeri*. *Journal of environmental science and health Part A, Toxic/hazardous substances & environmental engineering*. 2002;37(4):573-8.

Yucesoy B, Yucel A, Erdem O, Burgaz S, Imir T, Karakaya AE, et al. Effects of occupational chronic co-exposure to n-hexane, toluene, and methyl ethyl ketone on NK cell activity and some immunoregulatory cytokine levels in shoe workers. *Human & experimental toxicology*. 1999;18(9):541-6.

Yue K, Yang WQ, Peng Y, Peng CH, Tan B, Xu ZF, et al. Individual and combined effects of multiple global change drivers on terrestrial phosphorus pools: A meta-analysis. *Science of the Total Environment*. 2018;630:181-8.

Yuede CM, Olney JW, Creeley CE. Developmental neurotoxicity of alcohol and anesthetic drugs is augmented by co-exposure to caffeine. *Brain sciences*. 2013;3(3):1128-52.

Zago A, Leao RM, Carneiro-de-Oliveira PE, Marin MT, Cruz FC, Planeta CS. Effects of simultaneous exposure to stress and nicotine on nicotine-induced locomotor activation in adolescent and adult rats. *Brazilian journal of medical and biological research = Revista brasileira de pesquisas medicas e biologicas*. 2012;45(1):33-7.

Zaichkina SI, Aptikaeva GF, Akhmadieva AK, Rozanova OM, Smirnova EN, Ganassi EE. Induction of cytogenetic damage in Chinese hamster cells after combined exposure to low doses of gamma-radiation and various chemical and physical agents. *Genetika*. 1996;32(12):1721-4.

Zamaratskaia G, Thogersen R, Candek-Potokar M, Rasmussen MK. Co-treatment with indole-3-carbinol and resveratrol modify porcine CYP1A and CYP3A activities and expression. *Xenobiotica*. 2018;48(3):232-40.

Zarei F, Rezazadeh Azari M, Salehpour S, Khodakarim S, Omid L, Tavakol E. Respiratory Effects of Simultaneous Exposure to Respirable Crystalline Silica Dust, Formaldehyde, and Triethylamine of a Group of Foundry Workers. *Journal of research in health sciences*. 2017;17(1):e00371.

Zeller WJ, Berger MR, Henne T, Weber E. More than additive toxicity of the combination of 1-methyl-1-nitrosourea plus 1,3-bis(2-chloroethyl)-1-nitrosourea in the rat. *Cancer research*. 1986;46(4 Pt 1):1714-6.

Zeng HH, Fu X, Liang YP, Qin LT, Mo LY. Risk assessment of an organochlorine pesticide mixture in the surface waters of Qingshitan Reservoir in Southwest China. *Rsc Advances*. 2018;8(32):17797-805.

Zeng H-H, Lei C-W, Zhang Y-H, Cao Y, Liu Z-T. Prediction of the joint toxicity of five organophosphorus pesticides to *Daphnia magna*. *Ecotoxicology (London, England)*. 2014;23(10):1870-7.

Zeng LH, McGowan S, Cao YM, Chen X. Effects of dam construction and increasing pollutants on the ecohydrological evolution of a shallow freshwater lake in the Yangtze floodplain. *Science of the Total Environment*. 2018;621:219-27.

Zeng M, Lin Z, Yin D, Yin K. QSAR for predicting joint toxicity of halogenated benzenes to *Dicrateria zhanjiangensis*. *Bulletin of environmental contamination and toxicology*. 2008;81(6):525-30.

Zeng QB, Xu YY, Yu X, Yang J, Hong F, Zhang AH. Silencing GSK3 beta instead of DKK1 can inhibit osteogenic differentiation caused by co-exposure to fluoride and arsenic. *Bone*. 2019;123:196-203.

Zeng Y, Wang L, Jiang L, Cai X, Li Y. Joint Toxicity of Lead, Chromium, Cobalt and Nickel to *Photobacterium phosphoreum* at No Observed Effect Concentration. *Bulletin of environmental contamination and toxicology*. 2015;95(2):260-4.

Zeni O, Di Pietro R, d'Ambrosio G, Massa R, Capri M, Naarala J, et al. Formation of reactive oxygen species in L929 cells after exposure to 900 MHz RF radiation with and without co-exposure to 3-chloro-4-(dichloromethyl)-5-hydroxy-2(5H)-furanone. *Radiation research*. 2007;167(3):306-11.

Zhang AQ, Zhou GJ, Lam MHW, Leung KMY. Toxicities of the degraded mixture of Irgarol 1051 to marine organisms. *Chemosphere*. 2019;225:565-73.

Zhang C, Chen X, Tan L, Wang J. Combined toxicities of copper nanoparticles with carbon nanotubes on marine microalgae *Skeletonema costatum*. *Environmental science and pollution research international*. 2018;25(13):13127-33.

Zhang C, Chen XH, Tan LJ, Wang JT. Combined toxicities of copper nanoparticles with carbon nanotubes on marine microalgae *Skeletonema costatum*. *Environmental Science and Pollution Research*. 2018;25(13):13127-33.

Zhang C, Li YN, Liu LL, Gong Y, Xie YX, Cao Y. Chemical Structures of Polyphenols That Critically Influence the Toxicity of ZnO Nanoparticles. *Journal of Agricultural and Food Chemistry*. 2018;66(7):1714-22.

Zhang C, Xie M, Chen J, Zhang YR, Wei SJ, Ma XY, et al. UV-B radiation induces DEHP degradation and their combined toxicological effects on *Scenedesmus acuminatus*. *Aquatic Toxicology*. 2018;203:172-8.

Zhang CL, Li Q, Shen YP, Zhou N, Wang XS, Li J, et al. Monitoring of aeolian desertification on the Qinghai-Tibet Plateau from the 1970s to 2015 using Landsat images. *Science of the Total Environment*. 2018;619:1648-59.

Zhang DL, Bai YL, Bowman JP. Impact of Combined Acidic and Hyperosmotic Shock Conditions on the Proteome of *Listeria monocytogenes* ATCC 19115 in a Time-Course Study. *Journal of Food Quality*. 2019.

Zhang H, Shin PKS, Cheung SG. Physiological responses and scope for growth upon medium-term exposure to the combined effects of ocean acidification and temperature in a subtidal scavenger *Nassarius conoidalis*. *Marine environmental research*. 2015;106:51-60.

Zhang HF, Lu X, Song LF, Zhang LH. Effects of Loosely Bound EPS Release and Floc Reconstruction on Sludge Dewaterability. *Water Air and Soil Pollution*. 2018;229(2).

Zhang HG, Quan X, Chen S, Fan XF, Wei GL, Yu HT. Combined Effects of Surface Charge and Pore Size on Co-Enhanced Permeability and Ion Selectivity through RGO-OCNT Nanofiltration Membranes. *Environmental Science & Technology*. 2018;52(8):4827-34.

Zhang HY, Yang YS, Qi HY, Lu Y, Yu T. Hydrochemical evolution of rare cold mineral waters in the Wudalianchi UNESCO Global Geopark, China. *Environmental Earth Sciences*. 2018;77(10).

Zhang J, Liu L, Ren L, Feng W, Lv P, Wu W, et al. The single and joint toxicity effects of chlorpyrifos and beta-cypermethrin in zebrafish (*Danio rerio*) early life stages. *Journal of hazardous materials*. 2017;334:121-31.

Zhang JY, Zhang YF. Combined Exposure Ratio Evaluation for Micro-Power Devices. *Ieee Access*. 2018;6:19175-81.

Zhang L, Jin YP. Toxic effects of combined treatment of 1,2-dichloroethane and ethanol on mouse brain and the related mechanisms. *Journal of Biochemical and Molecular Toxicology*. 2019;33(5).

Zhang L, Sun XY. Evaluation of maifanite and silage as amendments for green waste composting. *Waste Management*. 2018;77:435-46.

Zhang L, Zhou P-J, Yang F, Wang Z-D. Computer-based QSARs for predicting mixture toxicity of benzene and its derivatives. *Chemosphere*. 2007;67(2):396-401.

Zhang L-f, Liu L-s, Chu X-m, Xie H, Cao L-j, Guo C, et al. Combined effects of a high-fat diet and chronic valproic acid treatment on hepatic steatosis and hepatotoxicity in rats. *Acta pharmacologica Sinica*. 2014;35(3):363-72.

Zhang LH, Zhou LN, Han LS, Zhao CY, Norton JM, Li HX, et al. Benzo(a)pyrene inhibits the accumulation and toxicity of cadmium in subcellular fractions of *Eisenia fetida*. *Chemosphere*. 2019;219:740-7.

Zhang LL, Muccillo VBD, Van Gestel CAM. A combined toxicokinetics and toxicodynamics approach to investigate delayed lead toxicity in the soil invertebrate *Enchytraeus crypticus*. *Ecotoxicology and Environmental Safety*. 2019;169:33-9.

Zhang Q, Lai W, Yin T, Zhang C, Yue C, Cheng J, et al. Investigation of the Viability of Cells upon Co-Exposure to Gold and Iron Oxide Nanoparticles. *Bioconjugate chemistry*. 2018.

Zhang Q, Lai WE, Yin T, Zhang CL, Yue CX, Cheng J, et al. Investigation of the Viability of Cells upon Co-Exposure to Gold and Iron Oxide Nanoparticles. *Bioconjugate Chemistry*. 2018;29(6):2120-5.

Zhang Q, Qu Q, Lu T, Ke MJ, Zhu YC, Zhang M, et al. The combined toxicity effect of nanoplastics and glyphosate on *Microcystis aeruginosa* growth. *Environmental Pollution*. 2018;243:1106-12.

Zhang QW, Zhang H, Liu XR, Zhang AP, Xiao MJ, Yang ZL. Variation and driving factors of nitrous oxide emissions from irrigated paddy field in the arid and semiarid region. *International Soil and Water Conservation Research*. 2018;6(3):245-52.

Zhang S, Chen H, Wang A, Liu Y, Hou HW, Hu QY. Combined effects of co-exposure to formaldehyde and acrolein mixtures on cytotoxicity and

genotoxicity in vitro. *Environmental Science and Pollution Research*. 2018;25(25):25306-14.

Zhang SN, Su LM, Zhang XJ, Li C, Qin WC, Zhang DM, et al. Combined Toxicity of Nitro-Substituted Benzenes and Zinc to *Photobacterium Phosphoreum*: Evaluation and QSAR Analysis. *International Journal of Environmental Research and Public Health*. 2019;16(6).

Zhang T, Li X, Lu Y, Liu P, Zhang C, Luo H. Joint toxicity of heavy metals and chlorobenzenes to pyriformis *Tetrahymena*. *Chemosphere*. 2014;104:177-83.

Zhang W, Liu K, Li J, Chen L, Lin K. Uptake and depuration kinetics of lead (Pb) and biomarker responses in the earthworm *Eisenia fetida* after simultaneous exposure to decabromodiphenyl ether (BDE209). *Ecotoxicology and environmental safety*. 2015;113:45-51.

Zhang W, Zhang SH, Zhang ML, Yang LG, Cheng BJ, Li JP, et al. Individual and combined effects of *Fusarium* toxins on apoptosis in PK15 cells and the protective role of N-acetylcysteine. *Food and Chemical Toxicology*. 2018;111:27-43.

Zhang WZ, Dong BZ. Effects of physical and chemical aspects on membrane fouling and cleaning using interfacial free energy analysis in forward osmosis. *Environmental Science and Pollution Research*. 2018;25(22):21555-67.

Zhang X, Hirota JA, Yang C, Carlsten C. Effect of GST variants on lung function following diesel exhaust and allergen co-exposure in a controlled human crossover study. *Free radical biology & medicine*. 2016;96:385-91.

Zhang X. Simultaneous exposure to dietary acrylamide and corn oil developed carcinogenesis through cell proliferation and inhibition of apoptosis by regulating p53-mediated mitochondria-dependent signaling pathway. *Toxicology and industrial health*. 2009;25(2):101-9.

Zhang XC, Zhang ZJ, Su GK, Tao HW, Xu WH, Hu LH. Buoyant wind-driven pollutant dispersion and recirculation behaviour in wedge-shaped roof urban street canyons. *Environmental Science and Pollution Research*. 2019;26(8):8289-302.

Zhang X-Q, Hu X-N, Chen C-D, Liu H-J. Combined toxicity of cadmium and S-metolachlor to *Scenedesmus obliquus*. *Huan jing ke xue= Huanjing kexue*. 2015;36(3):1069-74.

Zhang Y, Liu M, Liu J, Wang X, Wang C, Ai W, et al. Combined toxicity of triclosan, 2,4-dichlorophenol and 2,4,6-trichlorophenol to zebrafish (*Danio rerio*). *Environmental toxicology and pharmacology*. 2018;57:9-18.

Zhang Y, Ma J, Shi L, Cao D, Quan X. Joint toxicity of cadmium and SDBS on *Daphnia magna* and *Danio rerio*. *Ecotoxicology* (London, England). 2016;25(10):1703-11.

Zhang Y, Wang TF, Li H, Bao NN, Hall-Spencer JM, Gao KS. Rising levels of temperature and CO₂ antagonistically affect phytoplankton primary productivity in the South China Sea. *Marine Environmental Research*. 2018;141:159-66.

Zhang Y, Yang RX, Wang SY, Si XH, Duan XW, Zhou JT. Influence of humic substances on the toxic effects of cadmium and SDBS to the green alga *Scenedesmus obliquus*. *Environmental Toxicology and Pharmacology*. 2019;68:94-100.

Zhang Y, Ye C, Wang A, Zhu X, Chen C, Xian J, et al. Isolated and combined exposure to ammonia and nitrite in giant freshwater pawn (*Macrobrachium rosenbergii*): effects on the oxidative stress, antioxidant enzymatic activities and apoptosis in haemocytes. *Ecotoxicology* (London, England). 2015;24(7-8):1601-10.

Zhang YD, Virjamo V, Sobuj N, Du WC, Yin Y, Nybakken L, et al. Sex-related responses of European aspen (*Populus tremula* L.) to combined stress: TiO₂ nanoparticles, elevated temperature and CO₂ concentration. *Journal of Hazardous Materials*. 2018;352:130-8.

Zhang YH, Liu M, Liu JF, Wang XD, Wang CH, Ai WM, et al. Combined toxicity of triclosan, 2,4-dichlorophenol and 2,4,6-trichlorophenol to zebrafish (*Danio rerio*). *Environmental Toxicology and Pharmacology*. 2018;57:9-18.

Zhang Y-H, Liu S-S, Liu H-L, Liu Z-Z. Evaluation of the combined toxicity of 15 pesticides by uniform design. *Pest management science*. 2010;66(8):879-87.

Zhang Y-H, Liu S-S, Song X-Q, Ge H-L. Prediction for the mixture toxicity of six organophosphorus pesticides to the luminescent bacterium Q67. *Ecotoxicology and environmental safety*. 2008;71(3):880-8.

Zhang YN, Zhao JC, Zhou YJ, Qu J, Chen JW, Li C, et al. Combined effects of dissolved organic matter, pH, ionic strength and halides on photodegradation of oxytetracycline in simulated estuarine waters. *Environmental Science-Processes & Impacts*. 2019;21(1):155-62.

Zhang YP, Niu ZG, Zhang Y, Zhang K. Occurrence of intracellular and extracellular antibiotic resistance genes in coastal areas of Bohai Bay (China) and the factors affecting them. *Environmental Pollution*. 2018;236:126-36.

Zhang YQ, Liu SL, Hou XY, Cheng FY, Shen ZY. Landscape- and climate change-induced hydrological alterations in the typically urbanized Beiyun River basin, Beijing, China. *Stochastic Environmental Research and Risk Assessment*. 2019;33(1):149-68.

Zhang ZM, Gao JF, Cai YJ. The effects of environmental factors and geographic distance on species turnover in an agriculturally dominated river network. *Environmental Monitoring and Assessment*. 2019;191(4).

Zhao F, Li YF, Huang LL, Gu YP, Zhang H, Zeng DQ, et al. Individual and combined toxicity of atrazine, butachlor, halosulfuron-methyl and mesotrione on the microalga *Selenastrum capricornutum*. *Ecotoxicology and Environmental Safety*. 2018;148:969-75.

Zhao FK, Yang L, Chen LD, Xiang Q, Li SJ, Sun L, et al. Soil contamination with antibiotics in a typical peri-urban area in eastern China: Seasonal variation, risk assessment, and microbial responses. *Journal of Environmental Sciences-China*. 2019;79:200-12.

Zhao HT, Jiang Q, Ma YK, Xie WX, Li XY, Yin CQ. Influence of urban surface roughness on build-up and wash-off dynamics of road-deposited sediment. *Environmental Pollution*. 2018;243:1226-34.

Zhao J, Dai YH, Wang ZY, Ren WT, Wei YP, Cao XS, et al. Toxicity of GO to Freshwater Algae in the Presence of Al₂O₃ Particles with Different Morphologies: Importance of Heteroaggregation. *Environmental Science & Technology*. 2018;52(22):13448-56.

Zhao J, Zhao Y, Liu B, Zhong K, Yao H, Lin K. Effect of metal accumulation-associated oxidative stress on the combined toxicity of quantum dots with Cu(2+) to *Bacillus subtilis*. *Environmental toxicology and pharmacology*. 2016;44:69-74.

Zhao SJ, Chen DY, Xu HM, Mei J, Qu Z, Liu P, et al. Combined effects of Ag and UiO-66 for removal of elemental mercury from flue gas. *Chemosphere*. 2018;197:65-72.

Zhao SY, Yang Q, Wang BH, Peng YH, Zhan JJ, Liu LF. Effects of combined exposure to perfluoroalkyl acids and heavy metals on bioaccumulation

and subcellular distribution in earthworms (*Eisenia fetida*) from co-contaminated soil. *Environmental Science and Pollution Research*. 2018;25(29):29335-44.

Zhao X, Toyooka T, Ibuki Y. Synergistic bactericidal effect by combined exposure to Ag nanoparticles and UVA. *The Science of the total environment*. 2013;458-460:54-62.

Zheng GX, Lu L, Yang YS, Wei JF, Han BX, Zhang Q, et al. Development of Microfluidic Dilution Network-Based System for Lab-on-a-Chip Microalgal Bioassays. *Analytical Chemistry*. 2018;90(22):13280-9.

Zheng XT, Berti AD, McCrone S, Roch M, Rosato AE, Rose WE, et al. Combination Antibiotic Exposure Selectively Alters the Development of Vancomycin Intermediate Resistance in *Staphylococcus aureus*. *Antimicrobial Agents and Chemotherapy*. 2018;62(2).

Zhidkov VV, Borshchenko VV, Manovtsev GA. Effect of combined exposure to dry air warming and cooling water procedures on orthostatic stability in humans. *Kosmicheskaiia biologiiia i aviakosmicheskaiia meditsina*. 1978;12(4):85-7.

Zhorova ES, Kalistratova VS, Nisimov PG, Parfenova IM, Tishchenko GS. Complex application of indralin and ferrocine for the combined exposure on the organism of external gamma-irradiation and incorporation of ¹³⁷Cs. *Radiatsionnaia biologiiia, radioecologiiia*. 2010;50(2):171-9.

Zhou CC, Gao ZY, He YQ, Wu MQ, Chen F, Wang J, et al. Effects of lead, mercury, aluminium and manganese co-exposure on the serum BDNF concentration of pre-school children in Taizhou, China. *Chemosphere*. 2019;217:158-65.

Zhou F, Feng C, Fan G. Combined exposure of low dose lead, cadmium, arsenic, and mercury in mice. *Chemosphere*. 2016;165:564-5.

Zhou FK, Xie J, Zhang SY, Yin GM, Gao YY, Zhang YY, et al. Lead, cadmium, arsenic, and mercury combined exposure disrupted synaptic homeostasis through activating the Snk-SPAR pathway. *Ecotoxicology and Environmental Safety*. 2018;163:674-84.

Zhou GY, Luo Q, Chen YJ, He M, Zhou LY, Frank D, et al. Effects of livestock grazing on grassland carbon storage and release override impacts associated with global climate change. *Global Change Biology*. 2019;25(3):1119-32.

Zhou H, George S, Li C, Gurusamy S, Sun X, Gong Z, et al. Combined toxicity of prevalent mycotoxins studied in fish cell line and zebrafish larvae revealed that type of interactions is dose-dependent. *Aquatic toxicology* (Amsterdam, Netherlands). 2017;193:60-71.

Zhou H, Young CJ, Loch-Caruso R, Shikanov A. Detection of lindane and 7,12-dimethylbenz a anthracene toxicity at low concentrations in a three-dimensional ovarian follicle culture system. *Reproductive Toxicology*. 2018;78:141-9.

Zhou Q, Gu Y, Yue X, Mao G, Wang Y, Su H, et al. Combined toxicity and underlying mechanisms of a mixture of eight heavy metals. *Molecular medicine reports*. 2017;15(2):859-66.

Zhou QC, Zhang YL, Li KD, Huang LC, Yang FL, Zhou YY, et al. Seasonal and spatial distributions of euphotic zone and long-term variations in water transparency in a clear oligotrophic Lake Fuxian, China. *Journal of Environmental Sciences*. 2018;72:185-97.

Zhou S, Duan C, Michelle WHG, Yang F, Wang X. Individual and combined toxic effects of cypermethrin and chlorpyrifos on earthworm. *Journal of environmental sciences (China)*. 2011;23(4):676-80.

Zhou SB, Chen QQ, Di Paolo C, Shao Y, Hollert H, Seiler TB. Behavioral profile alterations in zebrafish larvae exposed to environmentally relevant concentrations of eight priority pharmaceuticals. *Science of the Total Environment*. 2019;664:89-98.

Zhou WY, Yang WL, Wan WX, Zhang J, Zhou W, Yang HS, et al. The influences of industrial gross domestic product, urbanization rate, environmental investment, and coal consumption on industrial air pollutant emission in China. *Environmental and Ecological Statistics*. 2018;25(4):429-42.

Zhou Y, Xu Y-B, Xu J-X, Zhang X-H, Xu S-H, Du Q-P. Combined toxic effects of heavy metals and antibiotics on a *Pseudomonas fluorescens* strain ZY2 isolated from swine wastewater. *International journal of molecular sciences*. 2015;16(2):2839-50.

Zhou Y, Zhang W, Guo Z, Zhang L. Effects of salinity and copper co-exposure on copper bioaccumulation in marine rabbitfish *Siganus oramin*. *Chemosphere*. 2017;168:491-500.

Zhu B, Wang Q, Shi X, Guo Y, Xu T, Zhou B. Effect of combined exposure to lead and decabromodiphenyl ether on neurodevelopment of zebrafish larvae. *Chemosphere*. 2016;144:1646-54.

Zhu B, Wang Q, Wang X, Zhou B. Impact of co-exposure with lead and decabromodiphenyl ether (BDE-209) on thyroid function in zebrafish larvae. *Aquatic toxicology (Amsterdam, Netherlands)*. 2014;157:186-95.

Zhu J, Yu L, Wu L, Hu L, Shi H. Unexpected phenotypes of malformations induced in *Xenopus tropicalis* embryos by combined exposure to triphenyltin and 9-cis-retinoic acid. *Journal of environmental sciences (China)*. 2014;26(3):643-9.

Zhu JB, Wang J, Ding Y, Liu BY, Xiao W. A systems-level approach for investigating organophosphorus pesticide toxicity. *Ecotoxicology and Environmental Safety*. 2018;149:26-35.

Zhu JH, Zou ZH, Shen Y, Li JF, Shi SN, Han SW, et al. Increased ZnO nanoparticle toxicity to wheat upon co-exposure to phenanthrene. *Environmental Pollution*. 2019;247:108-17.

Zhu L, Duan P, Hu XX, Wang Y, Chen CL, Wan J, et al. Exposure to cadmium and mono-(2-ethylhexyl) phthalate induce biochemical changes in rat liver, spleen, lung and kidney as determined by attenuated total reflection-Fourier transform infrared spectroscopy. *Journal of Applied Toxicology*. 2019;39(5):783-97.

Zhu XX, Wang YY, Hou XY, Kong QD, Sun YF, Wang J, et al. High temperature promotes the inhibition effect of Zn²⁺ on inducible defense of *Scenedesmus obliquus*. *Chemosphere*. 2019;216:203-12.

Zhu XZ, Yao J, Wang F, Yuan ZM, Liu JL, Jordan G, et al. Combined effects of antimony and sodium diethyldithiocarbamate on soil microbial activity and speciation change of heavy metals. Implications for contaminated lands hazardous material pollution in nonferrous metal mining areas. *Journal of Hazardous Materials*. 2018;349:160-7.

Zhu ZL, Wang SC, Zhao FF, Wang SG, Liu FF, Liu GZ. Joint toxicity of microplastics with triclosan to marine microalgae *Skeletonema costatum*. *Environmental Pollution*. 2019;246:509-17.

Zilelidou EA, Skandamis PN. Growth, detection and virulence of *Listeria monocytogenes* in the presence of other microorganisms: microbial interactions from species to strain level. *International Journal of Food Microbiology*. 2018;277:10-25.

Zimmer KE, Kraugerud M, Aleksandersen M, Gutleb AC, Ostby GC, Dahl E, et al. Fetal adrenal development: comparing effects of combined exposures to PCB 118 and PCB 153 in a sheep model. *Environmental toxicology*. 2013;28(3):164-77.

Zoremba N, Coburn M, Schalte G. Delirium in intensive care patients. A multiprofessional challenge. *Anaesthesist*. 2018;67(11):811-20.

Zotovitch A, Rezvanov A, Chanson R, Zhang L, Hacker N, Kurchikov K, et al. Low-k protection from F radicals and VUV photons using a multilayer pore grafting approach. *Journal of Physics D-Applied Physics*. 2018;51(32).

Zou X, Lin Z, Deng Z, Yin D, Zhang Y. The joint effects of sulfonamides and their potentiator on *Photobacterium phosphoreum*: differences between the acute and chronic mixture toxicity mechanisms. *Chemosphere*. 2012;86(1):30-5.

Zou X, Zhou X, Lin Z, Deng Z, Yin D. A docking-based receptor library of antibiotics and its novel application in predicting chronic mixture toxicity for environmental risk assessment. *Environmental monitoring and assessment*. 2013;185(6):4513-27.

Zou X-Y, Xu B, Yu C-P, Zhang H-W. Combined toxicity of ferroferric oxide nanoparticles and arsenic to the ciliated protozoa *Tetrahymena pyriformis*. *Aquatic toxicology (Amsterdam, Netherlands)*. 2013;134-135:66-73.

Zouboulis CC, Seltsmann H, Sass JO, Ruhl R, Plum C, Hettmannsperger U, et al. Retinoid signaling by all-trans retinoic acid and all-trans retinoyl-beta-D-glucuronide is attenuated by simultaneous exposure of human keratinocytes to retinol. *The Journal of investigative dermatology*. 1999;112(2):157-64.

Zribi OT, Slama I, Trabelsi N, Hamdi A, Smaoui A, Abdelly C. Combined effects of salinity and phosphorus availability on growth, gas exchange, and nutrient status of *Catapodium rigidum*. *Arid Land Research and Management*. 2018;32(3):277-90.

Zuo P, Jiang L, Li X, Li B, Ran P, Li XJ, et al. Metal (Ag, Pt)-MoS₂ Hybrids Greenly Prepared Through Photochemical Reduction of Femtosecond Laser Pulses for SERS and HER. *Acs Sustainable Chemistry & Engineering*. 2018;6(6):7704-14.

Zuo ZH, Zhang TY, Guo YX, Chu J, Qu GG, Miao LZ, et al. Serosurvey of Avian metapneumovirus, *Orithobacterium rhinotracheale*, and *Chlamydia psittaci* and Their Potential Association with Avian Airsacculitis. *Biomedical and Environmental Sciences*. 2018;31(5):403-+.

Zuskin E, Valic F. Respiratory response in simultaneous exposure to flax and hemp dust. *British journal of industrial medicine*. 1973;30(4):375-80.

C. Hormesis

Afanas'ev I. Signaling and Damaging Functions of Free Radicals in Aging-Free Radical Theory, Hormesis, and TOR. *Aging and disease*. 2010;1(2):75-88.

Afanas'Ev IK. Hormetonic syndrome in cysticercosis of the brain. *Zhurnal nevropatologii i psikiatrii imeni SS Korsakova* (Moscow, Russia : 1952). 1960;60:1123-5.

Agathokleous E, Belz RG, Calatayud V, De Marco A, Hoshika Y, Kitao M, et al. Predicting the effect of ozone on vegetation via linear non-threshold (LNT), threshold and hormetic dose-response models. *The Science of the total environment*. 2019;649:61-74.

Agathokleous E, Kitao M, Calabrese EJ. Emission of volatile organic compounds from plants shows a biphasic pattern within an hormetic context. *Environmental pollution* (Barking, Essex : 1987). 2018;239:318-21.

Agathokleous E, Kitao M, Calabrese EJ. Environmental hormesis and its fundamental biological basis: Rewriting the history of toxicology. *Environmental research*. 2018;165:274-8.

Agathokleous E, Kitao M, Calabrese EJ. Hormesis: A Compelling Platform for Sophisticated Plant Science. *Trends in plant science*. 2019;24(4):318-27.

Agathokleous E, Kitao M, Calabrese EJ. Hormetic dose responses induced by lanthanum in plants. *Environmental pollution* (Barking, Essex : 1987). 2019;244:332-41.

Agathokleous E, Kitao M, Calabrese EJ. Human and veterinary antibiotics induce hormesis in plants: Scientific and regulatory issues and an environmental perspective. *Environment international*. 2018;120:489-95.

Agathokleous E, Kitao M, Calabrese EJ. The rare earth element (REE) lanthanum (La) induces hormesis in plants. *Environmental pollution* (Barking, Essex : 1987). 2018;238:1044-7.

Agathokleous E, Kitao M, Harayama H. On the Nonmonotonic, Hormetic Photoprotective Response of Plants to Stress. *Dose-response : a publication of International Hormesis Society*. 2019;17(2):1559325819838420.

Agathokleous E, Kitao M. Ethylenediurea Induces Hormesis in Plants. *Dose-response : a publication of International Hormesis Society*. 2018;16(2):1559325818765280.

Agutter PS. Cell mechanics and stress: from molecular details to the 'universal cell reaction' and hormesis. *BioEssays : news and reviews in molecular, cellular and developmental biology*. 2007;29(4):324-33.

Alarcon de la Lastra C. Commentary on 'resveratrol commonly displays hormesis: occurrence and biomedical significance' by Calabrese et al. *Human & experimental toxicology*. 2010;29(12):1021-3.

Alavi M, Taeb S, Okhovat MA, Atefi M, Negahdari F. Look Different: Effect of Radiation Hormesis on the Survival Rate of Immunosuppressed Mice. *Journal of biomedical physics & engineering*. 2016;6(3):139-46.

Alcalde J, Izquierdo JM. Proteomic profile changes associated with diminished expression of T-cell intracellular antigens reveal a hormesis response. *Biochemical and biophysical research communications*. 2018;503(4):2569-75.

Ali RE, Rattan SIS. Curcumin's biphasic hormetic response on proteasome activity and heat-shock protein synthesis in human keratinocytes. *Annals of the New York Academy of Sciences*. 2006;1067:394-9.

An M. Mathematical modelling of dose-response relationship (hormesis) in allelopathy and its application. *Nonlinearity in biology, toxicology, medicine*. 2005;3(2):153-72.

Anderson LM. Cancer biology and hormesis: comments on Calabrese (2005). *Critical reviews in toxicology*. 2005;35(6):583-6.

Andoh T, Chiueh CC, Chock PB. Cyclic GMP-dependent protein kinase regulates the expression of thioredoxin and thioredoxin peroxidase-1 during hormesis in response to oxidative stress-induced apoptosis. *The Journal of biological chemistry*. 2003;278(2):885-90.

Andreev SV, Zelenetskaia VS. The concept of hormesis in the problem of the stimulating action of low doses of physicochemical factors. *Voprosy kurortologii, fizioterapii, i lechebnoi fizicheskoi kultury*. 1989(6):68-75.

Antonucci S, Mulvey JF, Burger N, Di Sante M, Hall AR, Hinchey EC, et al. Selective mitochondrial superoxide generation in vivo is cardioprotective through hormesis. *Free radical biology & medicine*. 2019;134:678-87.

Appleby AP. The practical implications of hormetic effects of herbicides on plants. *Human & experimental toxicology*. 1998;17(5):270-1.

Applegate JS. Getting ahead of ourselves: a comment on Professor Cross's legal implications of hormesis. *Human & experimental toxicology*. 2001;20(3):129-32.

Arumugam TV, Gleichmann M, Tang S-C, Mattson MP. Hormesis/preconditioning mechanisms, the nervous system and aging. Ageing research reviews. 2006;5(2):165-78.

Axelrod D, Burns K, Davis D, von Larebeke N. "Hormesis"--an inappropriate extrapolation from the specific to the universal. International journal of occupational and environmental health. 2004;10(3):335-9.

Ayyanath M-M, Cutler GC, Scott-Dupree CD, Prithiviraj B, Kandasamy S, Prithiviraj K. Gene expression during imidacloprid-induced hormesis in green peach aphid. Dose-response : a publication of International Hormesis Society. 2014;12(3):480-97.

Ayyanath M-M, Cutler GC, Scott-Dupree CD, Sibley PK. Transgenerational shifts in reproduction hormesis in green peach aphid exposed to low concentrations of imidacloprid. PloS one. 2013;8(9):e74532.

Azzam EI. Exposure to low level environmental agents: the induction of hormesis. Mutation research. 2011;726(2):89-90.

Bailer AJ, Oris JT. Defining the baseline for inhibition concentration calculations for hormetic hazards. Journal of applied toxicology : JAT. 2000;20(2):121-5.

Bailer AJ, Oris JT. Incorporating hormesis in the routine testing of hazards. Human & experimental toxicology. 1998;17(5):247-50.

Bailer AJ. Experiments, analyses and decisions: hormesis in ecotoxicology. Human & experimental toxicology. 2001;20(10):507-9; discussion 29-31.

Baldwin J, Grantham V. Radiation Hormesis: Historical and Current Perspectives. Journal of nuclear medicine technology. 2015;43(4):242-6.

Bao J, Huang B, Zou L, Chen S, Zhang C, Zhang Y, et al. Hormetic Effect of Berberine Attenuates the Anticancer Activity of Chemotherapeutic Agents. PloS one. 2015;10(9):e0139298.

Bao Y, Wang W, Zhou Z, Sun C. Benefits and risks of the hormetic effects of dietary isothiocyanates on cancer prevention. PloS one. 2014;9(12):e114764.

Baram M. The hormesis challenge for environmental health regulators. Human & experimental toxicology. 2001;20(3):133-5.

Baram PM. The hormesis challenge for environmental health regulators. Human & experimental toxicology. 2001;20(8):435-8.

Barnes DG. Reference dose (RfD): the possible impact of hormesis. Journal of applied toxicology : JAT. 2000;20(2):127-30.

Barone E, Calabrese V, Mancuso C. Ferulic acid and its therapeutic potential as a hormetin for age-related diseases. *Biogerontology*. 2009;10(2):97-108.

Bartolini D, Comodi J, Piroddi M, Incipini L, Sancineto L, Santi C, et al. Glutathione S-transferase pi expression regulates the Nrf2-dependent response to hormetic diselenides. *Free radical biology & medicine*. 2015;88(Pt B):466-80.

Bartolini D, Wang Y, Zhang J, Giustarini D, Rossi R, Wang GY, et al. A seleno-hormetine protects bone marrow hematopoietic cells against ionizing radiation-induced toxicities. *PloS one*. 2019;14(4):e0205626.

Beck BD, Seeley MR. Commentary on 'hormesis and toxic torts'. *Human & experimental toxicology*. 2008;27(2):115-6; discussion 9-20.

Bell IR, Ives JA, Jonas WB. Nonlinear effects of nanoparticles: biological variability from hormetic doses, small particle sizes, and dynamic adaptive interactions. *Dose-response : a publication of International Hormesis Society*. 2014;12(2):202-32.

Bellavite P, Chirumbolo S, Marzotto M. Hormesis and its relationship with homeopathy. *Human & experimental toxicology*. 2010;29(7):573-9.

Belz RG, Cedergreen N, Sorensen H. Hormesis in mixtures -- can it be predicted? *The Science of the total environment*. 2008;404(1):77-87.

Belz RG, Duke SO. Herbicides and plant hormesis. *Pest management science*. 2014;70(5):698-707.

Belz RG, Farooq MB, Wagner J. Does selective hormesis impact herbicide resistance evolution in weeds? ACCase-resistant populations of *Alopecurus myosuroides* Huds. as a case study. *Pest management science*. 2018;74(8):1880-91.

Belz RG, Piepho H-P. Modeling effective dosages in hormetic dose-response studies. *PloS one*. 2012;7(3):e33432.

Belz RG, Piepho H-P. Statistical modeling of the hormetic dose zone and the toxic potency completes the quantitative description of hormetic dose responses. *Environmental toxicology and chemistry*. 2015;34(5):1169-77.

Belz RG, Sinkkonen A. Selective toxin effects on faster and slower growing individuals in the formation of hormesis at the population level - A case study with *Lactuca sativa* and PCIB. *The Science of the total environment*. 2016;566-567:1205-14.

Belz RG. Herbicide hormesis can act as a driver of resistance evolution in weeds - PSII-target site resistance in *Chenopodium album* L. as a case study. *Pest management science*. 2018;74(12):2874-83.

Belz RG. Investigating a Potential Auxin-Related Mode of Hormetic/Inhibitory Action of the Phytotoxin Parthenin. *Journal of chemical ecology*. 2016;42(1):71-83.

Berge U, Kristensen P, Rattan SIS. Hormetic modulation of differentiation of normal human epidermal keratinocytes undergoing replicative senescence in vitro. *Experimental gerontology*. 2008;43(7):658-62.

Bernardini S, Dei A. Hormesis may provide a central concept for homeopathy development. *Toxicology and applied pharmacology*. 2006;211(1):84-5; author reply 6.

Bernardini S. Homeopathy: clarifying its relationship to hormesis by EJ Calabrese and WB Jonas. *Human & experimental toxicology*. 2010;29(7):537-8.

Bernhard WA, Purkayastha S, Milligan JR. Which DNA damage is likely to be relevant in hormetic responses? Dose-response : a publication of International Hormesis Society. 2007;6(2):184-95.

Bhakta-Guha D, Efferth T. Hormesis: Decoding Two Sides of the Same Coin. *Pharmaceuticals (Basel, Switzerland)*. 2015;8(4):865-83.

Birringer M. Hormetics: dietary triggers of an adaptive stress response. *Pharmaceutical research*. 2011;28(11):2680-94.

Blagosklonny MV. Hormesis does not make sense except in the light of TOR-driven aging. *Aging*. 2011;3(11):1051-62.

Bocci VA, Zanardi I, Travagli V. Ozone acting on human blood yields a hormetic dose-response relationship. *Journal of translational medicine*. 2011;9:66.

Bogen KT, Layton DW. Risk management for plausibly hormetic environmental carcinogens: the case of radon. *Human & experimental toxicology*. 1998;17(8):463-7.

Bond VP, Feinendegen LE, Sondhaus CA. Microdosimetric concepts applied to hormesis. *Health physics*. 1987;52(5):659-61.

Boonstra R, Manzon RG, Mihok S, Helson JE. Hormetic effects of gamma radiation on the stress axis of natural populations of meadow voles (*Microtus pennsylvanicus*). *Environmental toxicology and chemistry*. 2005;24(2):334-43.

Borak J, Sirianni G. Hormesis: implications for cancer risk assessment. Dose-response : a publication of International Hormesis Society. 2006;3(3):443-51.

Borchi E, Bargelli V, Guidotti V, Berti A, Stefani M, Nediani C, et al. Mild exposure of RIN-5F beta-cells to human islet amyloid polypeptide aggregates

upregulates antioxidant enzymes via NADPH oxidase-RAGE: an hormetic stimulus. *Redox biology*. 2013;2:114-22.

Borriello A, Bencivenga D, Caldarelli I, Tramontano A, Borgia A, Pirozzi AVA, et al. Resveratrol and cancer treatment: is hormesis a yet unsolved matter? *Current pharmaceutical design*. 2013;19(30):5384-93.

Bounias M, Navone-Nectoux M, Popeskovic DS. Toxicology of cupric salts in honeybees. I. Hormesis effects of organic derivatives on lethality parameters. *Ecotoxicology and environmental safety*. 1995;31(2):127-32.

Boxenbaum H, Neafsey PJ, Fournier DJ. Hormesis, Gompertz functions, and risk assessment. *Drug metabolism reviews*. 1988;19(2):195-229.

Boxenbaum H. Commentary: does caloric restriction induce hormesis? *Human & experimental toxicology*. 2000;19(6):330-1.

Boxenbaum H. Gompertz mortality analysis: aging, longevity hormesis and toxicity. *Archives of gerontology and geriatrics*. 1991;13(2):125-37.

Bozhkov AI, Sidorov VI, Kurguzova NI, Dlubovskaia VL. Metabolic memory enhances hormesis effect to the copper ions in age-depended manner. *Advances in gerontology = Uspekhi gerontologii*. 2014;27(1):72-80.

Brandes LJ. Hormetic effects of hormones, antihormones, and antidepressants on cancer cell growth in culture: in vivo correlates. *Critical reviews in toxicology*. 2005;35(6):587-92.

Brandes LJ. N,N-diethyl-2- 4-(phenylmethyl) phenoxy ethanamine (DPPE; tesmilifene), a chemopotentiating agent with hormetic effects on DNA synthesis in vitro, may improve survival in patients with metastatic breast cancer. *Human & experimental toxicology*. 2008;27(2):143-7.

Brisbin IL, Jr., McLeod KW, White GC. Sigmoid growth and the assessment of hormesis: a case for caution. *Health physics*. 1987;52(5):553-9.

Brito IP, Tropaldi L, Carbonari CA, Velini ED. Hormetic effects of glyphosate on plants. *Pest management science*. 2018;74(5):1064-70.

Brophy MO. Comments: implications of hormesis for industrial hygienists. *Human & experimental toxicology*. 2002;21(7):391-3.

Brosseau LM. Review of "Implications of Hormesis for Industrial Hygiene". *Human & experimental toxicology*. 2002;21(7):395.

Brown SL. Comments on "Implications of Hormesis for Industrial Hygiene". *Human & experimental toxicology*. 2002;21(7):397-8.

Brown WM, Olding RJ. Epigenetic-based hormesis and age-dependent altruism: Additions to the behavioural constellation of deprivation. *The Behavioral and brain sciences*. 2017;40:e320.

Bruchey AK, Gonzalez-Lima F. Behavioral, Physiological and Biochemical Hormetic Responses to the Autoxidizable Dye Methylene Blue. *American journal of pharmacology and toxicology*. 2008;3(1):72-9.

Brugmann WB, Firmani MA. Low concentrations of nitric oxide exert a hormetic effect on *Mycobacterium tuberculosis* in vitro. *Journal of clinical microbiology*. 2005;43(9):4844-6.

Brunk UT, Eaton JW. Peroxide hormesis? A commentary on "Hydrogen peroxide inhibits caspase-dependent apoptosis by inactivating procaspase-9 in an iron-dependent manner". *Free radical biology & medicine*. 2007;43(10):1372-3.

Bujarrabal A, Schumacher B. Hormesis running hot and cold. *Cell cycle (Georgetown, Tex)*. 2016;15(24):3335-6.

Bukowski JA, Lewis RJ. Hormesis and health: a little of what you fancy may be good for you. *Southern medical journal*. 2000;93(4):371-4.

Bukowski JA, Lewis RJ. Is the hygiene hypothesis an example of hormesis? *Nonlinearity in biology, toxicology, medicine*. 2003;1(2):155-66.

Burstein MT, Beach A, Richard VR, Koupaki O, Gomez-Perez A, Goldberg AA, et al. Interspecies Chemical Signals Released into the Environment May Create Xenohormetic, Hormetic and Cytostatic Selective Forces that Drive the Ecosystemic Evolution of Longevity Regulation Mechanisms. *Dose-response : a publication of International Hormesis Society*. 2012;10(1):75-82.

Butov A, Johnson T, Cypser J, Sannikov I, Volkov M, Sehl M, et al. Hormesis and debilitation effects in stress experiments using the nematode worm *Caenorhabditis elegans*: the model of balance between cell damage and HSP levels. *Experimental gerontology*. 2001;37(1):57-66.

Calabrese E. Hormesis and ethics: introduction. *Human & experimental toxicology*. 2008;27(8):601-2.

Calabrese E. Hormesis, non-linearity, and risk communication. *Human & experimental toxicology*. 2009;28(1):5-6.

Calabrese E. Risk communication and the challenge of hormesis. *Human & experimental toxicology*. 2003;22(1):1.

Calabrese EJ, Agathokleous E, Kozumbo WJ, Stanek EJ, 3rd, Leonard D. Estimating the range of the maximum hormetic stimulatory response. *Environmental research*. 2019;170:337-43.

Calabrese EJ, Agathokleous E. Building Biological Shields via Hormesis. *Trends in pharmacological sciences*. 2019;40(1):8-10.

Calabrese EJ, Bachmann KA, Bailer AJ, Bolger PM, Borak J, Cai L, et al. Biological stress response terminology: Integrating the concepts of adaptive response and preconditioning stress within a hormetic dose-response framework. *Toxicology and applied pharmacology*. 2007;222(1):122-8.

Calabrese EJ, Baldwin LA, Holland CD. Hormesis: a highly generalizable and reproducible phenomenon with important implications for risk assessment. *Risk analysis : an official publication of the Society for Risk Analysis*. 1999;19(2):261-81.

Calabrese EJ, Baldwin LA. Applications of hormesis in toxicology, risk assessment and chemotherapeutics. *Trends in pharmacological sciences*. 2002;23(7):331-7.

Calabrese EJ, Baldwin LA. Can the concept of hormesis Be generalized to carcinogenesis? *Regulatory toxicology and pharmacology : RTP*. 1998;28(3):230-41.

Calabrese EJ, Baldwin LA. Chemical hormesis: its historical foundations as a biological hypothesis. *Human & experimental toxicology*. 2000;19(1):2-31.

Calabrese EJ, Baldwin LA. Chemical hormesis: its historical foundations as a biological hypothesis. *Toxicologic pathology*. 1999;27(2):195-216.

Calabrese EJ, Baldwin LA. Chemotherapeutics and hormesis. *Critical reviews in toxicology*. 2003;33(3-4):305-53.

Calabrese EJ, Baldwin LA. Defining hormesis. *Human & experimental toxicology*. 2002;21(2):91-7.

Calabrese EJ, Baldwin LA. Ethanol and hormesis. *Critical reviews in toxicology*. 2003;33(3-4):407-24.

Calabrese EJ, Baldwin LA. Hormesis and high-risk groups. *Regulatory toxicology and pharmacology : RTP*. 2002;35(3):414-28.

Calabrese EJ, Baldwin LA. Hormesis as a biological hypothesis. *Environmental health perspectives*. 1998;106 Suppl 1:357-62.

Calabrese EJ, Baldwin LA. Hormesis as a default parameter in RfD derivation. *Human & experimental toxicology*. 1998;17(8):444-7.

Calabrese EJ, Baldwin LA. Hormesis at the National Toxicology Program (NTP): Evidence of Hormetic Dose Responses in NTP Dose-Range Studies. *Nonlinearity in biology, toxicology, medicine*. 2003;1(4):455-67.

Calabrese EJ, Baldwin LA. Hormesis: a generalizable and unifying hypothesis. *Critical reviews in toxicology*. 2001;31(4-5):353-424.

Calabrese EJ, Baldwin LA. Hormesis: the dose-response revolution. *Annual review of pharmacology and toxicology*. 2003;43:175-97.

Calabrese EJ, Baldwin LA. Hormesis: U-shaped dose responses and their centrality in toxicology. *Trends in pharmacological sciences*. 2001;22(6):285-91.

Calabrese EJ, Baldwin LA. Inorganics and hormesis. *Critical reviews in toxicology*. 2003;33(3-4):215-304.

Calabrese EJ, Baldwin LA. Peptides and hormesis. *Critical reviews in toxicology*. 2003;33(3-4):355-405.

Calabrese EJ, Baldwin LA. Possible examples of chemical hormesis in a previously published study. *Journal of applied toxicology : JAT*. 1993;13(3):169-72.

Calabrese EJ, Baldwin LA. Radiation hormesis: its historical foundations as a biological hypothesis. *Human & experimental toxicology*. 2000;19(1):41-75.

Calabrese EJ, Baldwin LA. Radiation hormesis: the demise of a legitimate hypothesis. *Human & experimental toxicology*. 2000;19(1):76-84.

Calabrese EJ, Baldwin LA. Tales of two similar hypotheses: the rise and fall of chemical and radiation hormesis. *Human & experimental toxicology*. 2000;19(1):85-97.

Calabrese EJ, Baldwin LA. The hormetic dose-response model is more common than the threshold model in toxicology. *Toxicological sciences : an official journal of the Society of Toxicology*. 2003;71(2):246-50.

Calabrese EJ, Baldwin LA. The marginalization of hormesis. *Human & experimental toxicology*. 2000;19(1):32-40.

Calabrese EJ, Baldwin LA. The marginalization of hormesis. *Toxicologic pathology*. 1999;27(2):187-94.

Calabrese EJ, Blain R. The occurrence of hormetic dose responses in the toxicological literature, the hormesis database: an overview. *Toxicology and applied pharmacology*. 2005;202(3):289-301.

Calabrese EJ, Blain RB. Hormesis and plant biology. *Environmental pollution (Barking, Essex : 1987)*. 2009;157(1):42-8.

Calabrese EJ, Blain RB. The hormesis database: the occurrence of hormetic dose responses in the toxicological literature. *Regulatory toxicology and pharmacology* : RTP. 2011;61(1):73-81.

Calabrese EJ, Calabrese V, Giordano J. The role of hormesis in the functional performance and protection of neural systems. *Brain circulation*. 2017;3(1):1-13.

Calabrese EJ, Cook RR. Hormesis: how it could affect the risk assessment process. *Human & experimental toxicology*. 2005;24(5):265-70.

Calabrese EJ, Dhawan G, Kapoor R, Iavicoli I, Calabrese V. HORMESIS: A Fundamental Concept with Widespread Biological and Biomedical Applications. *Gerontology*. 2016;62(5):530-5.

Calabrese EJ, Dhawan G, Kapoor R, Iavicoli I, Calabrese V. What is hormesis and its relevance to healthy aging and longevity? *Biogerontology*. 2015;16(6):693-707.

Calabrese EJ, Dhawan G, Kapoor R, Mattson MP, Rattan SI. Curcumin and hormesis with particular emphasis on neural cells. *Food and chemical toxicology* : an international journal published for the British Industrial Biological Research Association. 2019;129:399-404.

Calabrese EJ, Giordano JJ, Kozumbo WJ, Leak RK, Bhatia TN. Hormesis mediates dose-sensitive shifts in macrophage activation patterns. *Pharmacological research*. 2018;137:236-49.

Calabrese EJ, Hoffmann GR, Stanek EJ, Nascarella MA. Hormesis in high-throughput screening of antibacterial compounds in E coli. *Human & experimental toxicology*. 2010;29(8):667-77.

Calabrese EJ, Iavicoli I, Calabrese V. Hormesis: its impact on medicine and health. *Human & experimental toxicology*. 2013;32(2):120-52.

Calabrese EJ, Iavicoli I, Calabrese V. Hormesis: why it is important to biogerontologists. *Biogerontology*. 2012;13(3):215-35.

Calabrese EJ, Jonas WB. Homeopathy: clarifying its relationship to hormesis. *Human & experimental toxicology*. 2010;29(7):531-6.

Calabrese EJ, Mattson MP, Calabrese V. Resveratrol commonly displays hormesis: occurrence and biomedical significance. *Human & experimental toxicology*. 2010;29(12):980-1015.

Calabrese EJ, Mattson MP. Hormesis provides a generalized quantitative estimate of biological plasticity. *Journal of cell communication and signaling*. 2011;5(1):25-38.

Calabrese EJ, Mattson MP. How does hormesis impact biology, toxicology, and medicine? *NPJ aging and mechanisms of disease*. 2017;3:13.

Calabrese EJ, McCarthy ME, Kenyon E. The occurrence of chemically induced hormesis. *Health physics*. 1987;52(5):531-41.

Calabrese EJ, Nascarella MA. Tumor resistance explained by hormesis. *Dose-response : a publication of International Hormesis Society*. 2010;8(1):80-2.

Calabrese EJ, Shamoun DY, Hanekamp JC. The Integration of LNT and Hormesis for Cancer Risk Assessment Optimizes Public Health Protection. *Health physics*. 2016;110(3):256-9.

Calabrese EJ, Stanek EJ, 3rd, Nascarella MA, Hoffmann GR. Hormesis predicts low-dose responses better than threshold models. *International journal of toxicology*. 2008;27(5):369-78.

Calabrese EJ, Stanek EJ, 3rd, Nascarella MA. A detailed re-assessment supports the conclusion of the paper that hormesis is commonly observed in the Ames assay. *Mutation research*. 2012;747(1):157.

Calabrese EJ, Stanek EJ, 3rd, Nascarella MA. Evidence for hormesis in mutagenicity dose-response relationships. *Mutation research*. 2011;726(2):91-7.

Calabrese EJ, Staudenmayer JW, Stanek EJ, 3rd, Hoffmann GR. Hormesis outperforms threshold model in National Cancer Institute antitumor drug screening database. *Toxicological sciences : an official journal of the Society of Toxicology*. 2006;94(2):368-78.

Calabrese EJ, Staudenmayer JW, Stanek EJ. Drug development and hormesis: changing conceptual understanding of the dose response creates new challenges and opportunities for more effective drugs. *Current opinion in drug discovery & development*. 2006;9(1):117-23.

Calabrese EJ. Addiction and dose response: the psychomotor stimulant theory of addiction reveals that hormetic dose responses are dominant. *Critical reviews in toxicology*. 2008;38(7):599-617.

Calabrese EJ. Alzheimer's disease drugs: an application of the hormetic dose-response model. *Critical reviews in toxicology*. 2008;38(5):419-51.

Calabrese EJ. An assessment of anxiolytic drug screening tests: hormetic dose responses predominate. *Critical reviews in toxicology*. 2008;38(6):489-542.

Calabrese EJ. Another California milestone: the first application of hormesis in litigation and regulation. *International journal of toxicology*. 2008;27(1):31-3.

Calabrese EJ. Cancer biology and hormesis: human tumor cell lines commonly display hormetic (biphasic) dose responses. *Critical reviews in toxicology*. 2005;35(6):463-582.

Calabrese EJ. Converging concepts: adaptive response, preconditioning, and the Yerkes-Dodson Law are manifestations of hormesis. *Ageing research reviews*. 2008;7(1):8-20.

Calabrese EJ. Getting the dose-response wrong: why hormesis became marginalized and the threshold model accepted. *Archives of toxicology*. 2009;83(3):227-47.

Calabrese EJ. Historical foundations of hormesis. *Homeopathy : the journal of the Faculty of Homeopathy*. 2015;104(2):83-9.

Calabrese EJ. Hormesis and homeopathy: a step forward. *Homeopathy : the journal of the Faculty of Homeopathy*. 2017;106(3):131-2.

Calabrese EJ. Hormesis and homeopathy: introduction. *Human & experimental toxicology*. 2010;29(7):527-9.

Calabrese EJ. Hormesis and medicine. *British journal of clinical pharmacology*. 2008;66(5):594-617.

Calabrese EJ. Hormesis and mixtures. *Toxicology and applied pharmacology*. 2008;229(2):262-3; author reply 4.

Calabrese EJ. Hormesis and the law: introduction. *Human & experimental toxicology*. 2008;27(2):95-6.

Calabrese EJ. Hormesis and the salk polio vaccine. *Dose-response : a publication of International Hormesis Society*. 2012;10(1):91-5.

Calabrese EJ. Hormesis commonly observed in the assessment of aneuploidy in yeast. *Environmental pollution (Barking, Essex : 1987)*. 2017;225:713-28.

Calabrese EJ. Hormesis is central to toxicology, pharmacology and risk assessment. *Human & experimental toxicology*. 2010;29(4):249-61.

Calabrese EJ. Hormesis within a mechanistic context. *Homeopathy : the journal of the Faculty of Homeopathy*. 2015;104(2):90-6.

Calabrese EJ. Hormesis: a conversation with a critic. *Environmental health perspectives*. 2009;117(9):1339-43.

Calabrese EJ. Hormesis: a fundamental concept in biology. *Microbial cell (Graz, Austria)*. 2014;1(5):145-9.

Calabrese EJ. Hormesis: a revolution in toxicology, risk assessment and medicine. EMBO reports. 2004;5 Spec No:S37-40.

Calabrese EJ. Hormesis: changing view of the dose-response, a personal account of the history and current status. Mutation research. 2002;511(3):181-9.

Calabrese EJ. Hormesis: from mainstream to therapy. Journal of cell communication and signaling. 2014;8(4):289-91.

Calabrese EJ. Hormesis: from marginalization to mainstream: a case for hormesis as the default dose-response model in risk assessment. Toxicology and applied pharmacology. 2004;197(2):125-36.

Calabrese EJ. Hormesis: improving predictions in the low-dose zone. Experientia supplementum (2012). 2012;101:551-64.

Calabrese EJ. Hormesis: Path and Progression to Significance. International journal of molecular sciences. 2018;19(10).

Calabrese EJ. Hormesis: principles and applications. Homeopathy : the journal of the Faculty of Homeopathy. 2015;104(2):69-82.

Calabrese EJ. Hormesis: Toxicological foundations and role in aging research. Experimental gerontology. 2013;48(1):99-102.

Calabrese EJ. Hormesis: why it is important to toxicology and toxicologists. Environmental toxicology and chemistry. 2008;27(7):1451-74.

Calabrese EJ. Hormesis--basic, generalizable, central to toxicology and a method to improve the risk-assessment process. International journal of occupational and environmental health. 2004;10(4):466-7.

Calabrese EJ. Hormetic dose-response relationships in immunology: occurrence, quantitative features of the dose response, mechanistic foundations, and clinical implications. Critical reviews in toxicology. 2005;35(2-3):89-295.

Calabrese EJ. Hormetic mechanisms. Critical reviews in toxicology. 2013;43(7):580-606.

Calabrese EJ. Introduction to the BELLE newsletter: special issue on caloric restriction and hormesis. Human & experimental toxicology. 2000;19(6):319.

Calabrese EJ. Model Uncertainty via the Integration of Hormesis and LNT as the Default in Cancer Risk Assessment. Dose-response : a publication of International Hormesis Society. 2015;13(4):1559325815621764.

Calabrese EJ. Neuroscience and hormesis: overview and general findings. Critical reviews in toxicology. 2008;38(4):249-52.

Calabrese EJ. Originator of the hormesis concept: Rudolf Virchow or Hugo Schulz. *Human & experimental toxicology*. 2018;37(9):889-90.

Calabrese EJ. Overcompensation stimulation: a mechanism for hormetic effects. *Critical reviews in toxicology*. 2001;31(4-5):425-70.

Calabrese EJ. Paradigm lost, paradigm found: the re-emergence of hormesis as a fundamental dose response model in the toxicological sciences. *Environmental pollution (Barking, Essex : 1987)*. 2005;138(3):379-411.

Calabrese EJ. Post-conditioning hormesis creates a "subtraction to background" disease process: biological, aging, and environmental risk assessment implications. *Journal of cell communication and signaling*. 2018;12(1):31-4.

Calabrese EJ. Pre- and post-conditioning hormesis in elderly mice, rats, and humans: its loss and restoration. *Biogerontology*. 2016;17(4):681-702.

Calabrese EJ. Preconditioning is hormesis part I: Documentation, dose-response features and mechanistic foundations. *Pharmacological research*. 2016;110:242-64.

Calabrese EJ. Preconditioning is hormesis part II: How the conditioning dose mediates protection: Dose optimization within temporal and mechanistic frameworks. *Pharmacological research*. 2016;110:265-75.

Calabrese EJ. Should hormesis be the default model in risk assessment? *Human & experimental toxicology*. 2005;24(5):243.

Calabrese EJ. Stress biology and hormesis: the Yerkes-Dodson law in psychology--a special case of the hormesis dose response. *Critical reviews in toxicology*. 2008;38(5):453-62.

Calabrese EJ. The future of hormesis: where do we go from here? *Critical reviews in toxicology*. 2001;31(4-5):637-48.

Calabrese EJ. The maturing of hormesis as a credible dose-response model. *Nonlinearity in biology, toxicology, medicine*. 2003;1(3):319-43.

Calabrese EJ. Toxicological awakenings: the rebirth of hormesis as a central pillar of toxicology. *Toxicology and applied pharmacology*. 2005;204(1):1-8.

Calabrese V, Cornelius C, Cuzzocrea S, Iavicoli I, Rizzarelli E, Calabrese EJ. Hormesis, cellular stress response and vitagenes as critical determinants in aging and longevity. *Molecular aspects of medicine*. 2011;32(4-6):279-304.

Calabrese V, Cornelius C, Dinkova-Kostova AT, Calabrese EJ, Mattson MP. Cellular stress responses, the hormesis paradigm, and vitagenes: novel targets for

therapeutic intervention in neurodegenerative disorders. *Antioxidants & redox signaling*. 2010;13(11):1763-811.

Calabrese V, Cornelius C, Dinkova-Kostova AT, Calabrese EJ. Vitagenes, cellular stress response, and acetylcarnitine: relevance to hormesis. *BioFactors* (Oxford, England). 2009;35(2):146-60.

Calabrese V, Cornelius C, Dinkova-Kostova AT, Iavicoli I, Di Paola R, Koverech A, et al. Cellular stress responses, hormetic phytochemicals and vitagenes in aging and longevity. *Biochimica et biophysica acta*. 2012;1822(5):753-83.

Calabrese V, Cornelius C, Stella AMG, Calabrese EJ. Cellular stress responses, mitostress and carnitine insufficiencies as critical determinants in aging and neurodegenerative disorders: role of hormesis and vitagenes. *Neurochemical research*. 2010;35(12):1880-915.

Calabrese V, Cornelius C, Trovato A, Cavallaro M, Mancuso C, Di Rienzo L, et al. The hormetic role of dietary antioxidants in free radical-related diseases. *Current pharmaceutical design*. 2010;16(7):877-83.

Calabrese V, Giordano J, Crupi R, Di Paola R, Ruggieri M, Bianchini R, et al. Hormesis, cellular stress response and neuroinflammation in schizophrenia: Early onset versus late onset state. *Journal of neuroscience research*. 2017;95(5):1182-93.

Calabrese V, Giordano J, Ruggieri M, Berritta D, Trovato A, Ontario ML, et al. Hormesis, cellular stress response, and redox homeostasis in autism spectrum disorders. *Journal of neuroscience research*. 2016;94(12):1488-98.

Calabrese V, Giordano J, Signorile A, Laura Ontario M, Castorina S, De Pasquale C, et al. Major pathogenic mechanisms in vascular dementia: Roles of cellular stress response and hormesis in neuroprotection. *Journal of neuroscience research*. 2016;94(12):1588-603.

Calabrese V, Santoro A, Trovato Salinaro A, Modafferi S, Scuto M, Albouchi F, et al. Hormetic approaches to the treatment of Parkinson's disease: Perspectives and possibilities. *Journal of neuroscience research*. 2018;96(10):1641-62.

Calabrese V, Scapagnini G, Davinelli S, Koverech G, Koverech A, De Pasquale C, et al. Sex hormonal regulation and hormesis in aging and longevity: role of vitagenes. *Journal of cell communication and signaling*. 2014;8(4):369-84.

Calabrese EJ. Evidence that hormesis represents an "overcompensation" response to a disruption in homeostasis. *Ecotoxicology and environmental safety*. 1999;42(2):135-7.

Callahan BG. Can hormesis be a default for dose-response? *Human & experimental toxicology*. 2005;24(5):271-3.

Cameron JR, Moulder JE. Proposition: radiation hormesis should be elevated to a position of scientific respectability. *Medical physics*. 1998;25(8):1407-10.

Campos B, Garcia-Reyero N, Rivetti C, Escalon L, Habib T, Tauler R, et al. Identification of metabolic pathways in *Daphnia magna* explaining hormetic effects of selective serotonin reuptake inhibitors and 4-nonylphenol using transcriptomic and phenotypic responses. *Environmental science & technology*. 2013;47(16):9434-43.

Carelli G, Iavicoli I, Castellino N. Hormesis and industrial hygiene: a new hypothesis for low-dose response in occupational risk assessment. *Human & experimental toxicology*. 2002;21(7):401-3.

Carelli G, Iavicoli I. Defining hormesis: the necessary tool to clarify experimentally the low dose-response relationship. *Human & experimental toxicology*. 2002;21(2):103-4; discussion 13-4.

Casero-Alonso V, Pepelyshev A, Wong WK. A web-based tool for designing experimental studies to detect hormesis and estimate the threshold dose. *Statistical papers (Berlin, Germany)*. 2018;59(4):1307-24.

Castillo-Quan JI, Li L, Kinghorn KJ, Ivanov DK, Tain LS, Slack C, et al. Lithium Promotes Longevity through GSK3/NRF2-Dependent Hormesis. *Cell reports*. 2016;15(3):638-50.

Cedergreen N, Ritz C, Streibig JC. Improved empirical models describing hormesis. *Environmental toxicology and chemistry*. 2005;24(12):3166-72.

Cedergreen N, Streibig JC, Kudsk P, Mathiassen SK, Duke SO. The occurrence of hormesis in plants and algae. Dose-response : a publication of International Hormesis Society. 2006;5(2):150-62.

Cedergreen N. Predicting hormesis in mixtures. *Integrated environmental assessment and management*. 2010;6(2):310-1.

Celorio-Mancera MdP, Ahn S-J, Vogel H, Heckel DG. Transcriptional responses underlying the hormetic and detrimental effects of the plant secondary

metabolite gossypol on the generalist herbivore *Helicoverpa armigera*. *BMC genomics*. 2011;12:575.

Chadwick KH. LNT hypothesis, thresholds and hormesis. *Journal of radiological protection : official journal of the Society for Radiological Protection*. 2005;25(1):107-9.

Chapman PM. Defining hormesis: comments on Calabrese and Baldwin (2002). *Human & experimental toxicology*. 2002;21(2):99-101; discussion 13-4.

Chapman PM. Ecological risk assessment (ERA) and hormesis. *The Science of the total environment*. 2002;288(1-2):131-40.

Chapman PM. Reflections on the future of hormesis. *Critical reviews in toxicology*. 2001;31(4-5):649-51.

Chapman PM. The implications of hormesis to ecotoxicology and ecological risk assessment. *Human & experimental toxicology*. 2001;20(10):499-505.

Chattopadhyay D, Chitnis A, Talekar A, Mulay P, Makkar M, James J, et al. Hormetic efficacy of rutin to promote longevity in *Drosophila melanogaster*. *Biogerontology*. 2017;18(3):397-411.

Chen D, Wei L. Chromosome aberration, cancer mortality and hormetic phenomena among inhabitants in areas of high background radiation in China. *Journal of radiation research*. 1991;32 Suppl 2:46-53.

Chen F, Liu S-S, Yu M, Qu R, Wang M-C. Blocking the entrance of AMP pocket results in hormetic stimulation of imidazolium-based ionic liquids to firefly luciferase. *Chemosphere*. 2015;132:108-13.

Chen H, Zhao T, Sun D, Wu M, Zhang Z. Changes of RNA N6-methyladenosine in the hormesis effect induced by arsenite on human keratinocyte cells. *Toxicology in vitro : an international journal published in association with BIBRA*. 2019;56:84-92.

Chen Y, Shen K, Shen C, Chen L, Chen X. Comparison of structure-dependent hormetic cytotoxicity induced by coplanar and non-coplanar PCB congeners. *Journal of hazardous materials*. 2010;180(1-3):773-6.

Chen Y-C. THE HORMESIS OF THE GREEN MACROALGA *ULVA FASCIATA* WITH LOW-DOSE (60) COBALT GAMMA RADIATION(1). *Journal of phycology*. 2011;47(4):939-43.

Chikramane PS, Suresh AK, Kane SG, Bellare JR. Metal nanoparticle induced hormetic activation: a novel mechanism of homeopathic medicines. *Homeopathy : the journal of the Faculty of Homeopathy*. 2017;106(3):135-44.

Chirumbolo S, Bjorklund G. PERM Hypothesis: The Fundamental Machinery Able to Elucidate the Role of Xenobiotics and Hormesis in Cell Survival and Homeostasis. *International journal of molecular sciences*. 2017;18(1).

Chirumbolo S. Dose response of high dilutions in gene expression and the concept of hormesis. *Human & experimental toxicology*. 2017;36(8):876-7.

Chirumbolo S. Hormesis, resveratrol and plant-derived polyphenols: some comments. *Human & experimental toxicology*. 2011;30(12):2027-30.

Chirumbolo S. Hormetic effect of *Rosa laevigata* Michx in CCl₄-induced hepatotoxicity and the presumptive role of PPARs. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2013;57:387-8.

Chirumbolo S. Possible role of NF-kappaB in hormesis during ageing. *Biogerontology*. 2012;13(6):637-46.

Cho S, Chae JS, Shin H, Shin Y, Song H, Kim Y, et al. Hormetic dose response to L-ascorbic acid as an anti-cancer drug in colorectal cancer cell lines according to SVCT-2 expression. *Scientific reports*. 2018;8(1):11372.

Choi J-H, Min W-K, Gopal J, Lee Y-M, Muthu M, Chun S, et al. Silver nanoparticle-induced hormesis of astrogloma cells: A Mu-2-related death-inducing protein-orchestrated modus operandi. *International journal of biological macromolecules*. 2018;117:1147-56.

Choi VWY, Cheung ALY, Cheng SH, Yu KN. Hormetic effect induced by alpha-particle-induced stress communicated in vivo between zebrafish embryos. *Environmental science & technology*. 2012;46(21):11678-83.

Christiani DC, Zhou W. Hormesis: the new approach in risk assessment? *Human & experimental toxicology*. 2002;21(7):399-400.

Christofi N, Hoffmann C, Tosh L. Hormesis responses of free and immobilized light-emitting bacteria. *Ecotoxicology and environmental safety*. 2002;52(3):227-31.

Clanton R, Saucier D, Ford J, Akabani G. Microbial influences on hormesis, oncogenesis, and therapy: A review of the literature. *Environmental research*. 2015;142:239-56.

Clement RT. What every dermatologist should know about homeopathy, hormesis, and pharmacological inversion. *Archives of dermatology*. 1997;133(2):245.

Cong M, He S, Ma H, Li G, Zhu F. Hormetic Effects of Carbendazim on the Virulence of *Botrytis cinerea*. *Plant disease*. 2018;102(5):886-91.

Cong M, He S, Zhang J, Luo C, Zhu F. Hormetic Effects of Mixtures of Carbendazim and Iprodione on the Virulence of *Botrytis cinerea*. *Plant disease*. 2019;103(1):95-101.

Cook R, Calabrese EJ. The importance of hormesis to public health. *Ciencia & saude coletiva*. 2007;12(4):955-63.

Cook R, Calabrese EJ. The importance of hormesis to public health. *Environmental health perspectives*. 2006;114(11):1631-5.

Cook RR, Calabrese EJ. Hormesis is biology, not religion. *Environmental health perspectives*. 2006;114(12):A688.

Cordeiro EMG, de Moura ILT, Fadini MAM, Guedes RNC. Beyond selectivity: are behavioral avoidance and hormesis likely causes of pyrethroid-induced outbreaks of the southern red mite *Oligonychus ilicis*? *Chemosphere*. 2013;93(6):1111-6.

Cornelius C, Graziano A, Calabrese EJ, Calabrese V. Hormesis and vitagenes in aging and longevity: mitochondrial control and hormonal regulation. *Hormone molecular biology and clinical investigation*. 2013;16(2):73-89.

Cornelius C, Koverech G, Crupi R, Di Paola R, Koverech A, Lodato F, et al. Osteoporosis and alzheimer pathology: Role of cellular stress response and hormetic redox signaling in aging and bone remodeling. *Frontiers in pharmacology*. 2014;5:120.

Cornelius C, Perrotta R, Graziano A, Calabrese EJ, Calabrese V. Stress responses, vitagenes and hormesis as critical determinants in aging and longevity: Mitochondria as a "chi". *Immunity & ageing : I & A*. 2013;10(1):15.

Corrigendum to "Sublethal and Hormesis Effects of Clothianidin on the Black Cutworm (*Lepidoptera*: *Noctuidae*)". *Journal of economic entomology*. 2018;111(6):3000-1.

Costantini D, Borremans B. The linear no-threshold model is less realistic than threshold or hormesis-based models: An evolutionary perspective. *Chemico-biological interactions*. 2019;301:26-33.

Costantini D, Metcalfe NB, Monaghan P. Ecological processes in a hormetic framework. *Ecology letters*. 2010;13(11):1435-47.

Costantini D, Monaghan P, Metcalfe NB. Prior hormetic priming is costly under environmental mismatch. *Biology letters*. 2014;10(2):20131010.

Costantini D. Hormesis Promotes Evolutionary Change. Dose-response : a publication of International Hormesis Society. 2019;17(2):1559325819843376.

Cottrell MA, Mills WA, Calabrese EJ. Funding trends in hormetic research. Human & experimental toxicology. 2019;38(6):746-50.

Cox LAT, Jr. Hormesis for fine particulate matter (PM 2.5). Dose-response : a publication of International Hormesis Society. 2012;10(2):209-18.

Cox LAT, Jr. Hormesis without cell killing. Risk analysis : an official publication of the Society for Risk Analysis. 2009;29(3):393-400.

Cross FB. Legal implications of hormesis. Human & experimental toxicology. 2001;20(3):122-8; discussion 36-8, 45-53, 56-8 passim.

Crump K. Evaluating the evidence for hormesis: a statistical perspective. Critical reviews in toxicology. 2001;31(4-5):669-79.

Crump KS, Duport P, Jiang H, Shilnikova NS, Krewski D, Zielinski JM. A meta-analysis of evidence for hormesis in animal radiation carcinogenesis, including a discussion of potential pitfalls in statistical analyses to detect hormesis. Journal of toxicology and environmental health Part B, Critical reviews. 2012;15(3):210-31.

Crump KS. Limitations in the National Cancer Institute antitumor drug screening database for evaluating hormesis. Toxicological sciences : an official journal of the Society of Toxicology. 2007;98(2):599-601; author reply 2-3.

Csaba G. Hormesis and immunity: A review. Acta microbiologica et immunologica Hungarica. 2018:1-14.

Cui J, Yang G, Pan Z, Zhao Y, Liang X, Li W, et al. Hormetic Response to Low-Dose Radiation: Focus on the Immune System and Its Clinical Implications. International journal of molecular sciences. 2017;18(2).

Cui X, Huo M, Chen C, Yu Z, Zhou C, Li A, et al. Low concentrations of Al(III) accelerate the formation of biofilm: Multiple effects of hormesis and flocculation. The Science of the total environment. 2018;634:516-24.

Cutler GC, Rix RR. Can poisons stimulate bees? Appreciating the potential of hormesis in bee-pesticide research. Pest management science. 2015;71(10):1368-70.

Cutler GC. Insects, insecticides and hormesis: evidence and considerations for study. Dose-response : a publication of International Hormesis Society. 2013;11(2):154-77.

Cuttler JM, Pollycove M. Nuclear energy and health: and the benefits of low-dose radiation hormesis. Dose-response : a publication of International Hormesis Society. 2009;7(1):52-89.

Cuttler JM. What becomes of nuclear risk assessment in light of radiation hormesis? Dose-response : a publication of International Hormesis Society. 2006;5(1):80-90.

Cypser J, Johnson TE. Hormesis extends the correlation between stress resistance and life span in long-lived mutants of *Caenorhabditis elegans*. Human & experimental toxicology. 2001;20(6):295-6; discussion 319-20.

Cypser JR, Johnson TE. Hormesis in *Caenorhabditis elegans* dauer-defective mutants. Biogerontology. 2003;4(4):203-14.

Cypser JR, Johnson TE. Multiple stressors in *Caenorhabditis elegans* induce stress hormesis and extended longevity. The journals of gerontology Series A, Biological sciences and medical sciences. 2002;57(3):B109-14.

Cypser JR, Tedesco P, Johnson TE. Hormesis and aging in *Caenorhabditis elegans*. Experimental gerontology. 2006;41(10):935-9.

Damelin LH, Alexander JJ. Metal-induced hormesis requires cPKC-dependent glucose transport and lowered respiration. Human & experimental toxicology. 2001;20(7):347-58.

Damelin LH, Vokes S, Whitcutt JM, Damelin SB, Alexander JJ. Hormesis: a stress response in cells exposed to low levels of heavy metals. Human & experimental toxicology. 2000;19(7):420-30.

Das DK. Commentary on 'resveratrol commonly displays hormesis: occurrence and biomedical significance' by Calabrese et al. Human & experimental toxicology. 2010;29(12):1016-7.

Dattilo S, Mancuso C, Koverech G, Di Mauro P, Ontario ML, Petralia CC, et al. Heat shock proteins and hormesis in the diagnosis and treatment of neurodegenerative diseases. Immunity & ageing : I & A. 2015;12:20.

De Carvalho LB, Alves PLCA, Duke SO. Hormesis with glyphosate depends on coffee growth stage. Anais da Academia Brasileira de Ciencias. 2013;85(2):813-21.

De Marchi B. Comments on Ortwin Renn's article 'Hormesis and risk communication': considerations about uncertainty, ignorance and governance. Human & experimental toxicology. 2003;22(1):25-9; discussion 43-9.

De Nicola E, Gallo M, Iaccarino M, Meric S, Oral R, Russo T, et al. Hormetic versus toxic effects of vegetable tannin in a multitest study. *Archives of environmental contamination and toxicology*. 2004;46(3):336-44.

De Nicola E, Meric S, Gallo M, Iaccarino M, Della Rocca C, Lofrano G, et al. Vegetable and synthetic tannins induce hormesis/toxicity in sea urchin early development and in algal growth. *Environmental pollution (Barking, Essex : 1987)*. 2007;146(1):46-54.

Dei A, Bernardini S. Hormetic effects of extremely diluted solutions on gene expression. *Homeopathy : the journal of the Faculty of Homeopathy*. 2015;104(2):116-22.

Delpla M. Let us come back to 'radiation hormesis'. *Health physics*. 1989;57(1):203-4.

Demirovic D, Rattan SIS. Curcumin induces stress response and hormetically modulates wound healing ability of human skin fibroblasts undergoing ageing in vitro. *Biogerontology*. 2011;12(5):437-44.

Demirovic D, Rattan SIS. Establishing cellular stress response profiles as biomarkers of homeodynamics, health and hormesis. *Experimental gerontology*. 2013;48(1):94-8.

Deng C, Zhao Q, Shukla R. Detecting hormesis using a non-parametric rank test. *Human & experimental toxicology*. 2000;19(12):703-8.

Deng Z, Lin Z, Zou X, Yao Z, Tian D, Wang D, et al. Model of hormesis and its toxicity mechanism based on quorum sensing: a case study on the toxicity of sulfonamides to *Photobacterium phosphoreum*. *Environmental science & technology*. 2012;46(14):7746-54.

Deng ZZ, Zhang F, Wu ZL, Yu ZY, Wu G. Chlorpyrifos-induced hormesis in insecticide-resistant and -susceptible *Plutella xylostella* under normal and high temperatures. *Bulletin of entomological research*. 2016;106(3):378-86.

Deocaris CC, Taira K, Kaul SC, Wadhwa R. Mimotope-hormesis and mortalin/grp75/mthsp70: a new hypothesis on how infectious disease-associated epitope mimicry may explain low cancer burden in developing nations. *FEBS letters*. 2005;579(3):586-90.

Dette H, Pepelyshev A, Wong WK. Optimal experimental design strategies for detecting hormesis. *Risk analysis : an official publication of the Society for Risk Analysis*. 2011;31(12):1949-60.

Dettmers A. On nutrition of the miniature pigs at the Hormel Institute. *Laboratory animal care*. 1968;18(1):116-9.

Deusing DJ, Winter S, Kler A, Kriesl E, Bonnlander B, Wenzel U, et al. A catechin-enriched green tea extract prevents glucose-induced survival reduction in *Caenorhabditis elegans* through sir-2.1 and uba-1 dependent hormesis. *Fitoterapia*. 2015;102:163-70.

Di Y-L, Cong M-L, Zhang R, Zhu F-X. Hormetic Effects of Trifloxystrobin on Aggressiveness of *Sclerotinia sclerotiorum*. *Plant disease*. 2016;100(10):2113-8.

Diamond DM. The search for hormesis in the nervous system. *Critical reviews in toxicology*. 2008;38(7):619-22.

Dias GRM, Schetinger MRC, Spanevello R, Mazzanti CM, Schmatz R, Loro VL, et al. Hormetic acute response and chronic effect of ethanol on adenine nucleotide hydrolysis in rat platelets. *Archives of toxicology*. 2009;83(3):263-9.

Diaz GJ, Calabrese E, Blain R. Aflatoxicosis in chickens (*Gallus gallus*): an example of hormesis? *Poultry science*. 2008;87(4):727-32.

Dietert RR. Commentary on hormetic dose-response relationships in immunology: occurrence, quantitative features of the dose response, mechanistic foundations, and clinical implications. *Critical reviews in toxicology*. 2005;35(2-3):305-6.

Ding J, Zhao Y, Zhang Z, Xu C, Mu W. Sublethal and Hormesis Effects of Clothianidin on the Black Cutworm (*Lepidoptera: Noctuidae*). *Journal of economic entomology*. 2018;111(6):2809-16.

Docea AO, Goumenou M, Calina D, Arsene AL, Dragoi CM, Gofita E, et al. Adverse and hormetic effects in rats exposed for 12 months to low dose mixture of 13 chemicals: RLRS part III. *Toxicology letters*. 2019;310:70-91.

Doss M. Evidence supporting radiation hormesis in atomic bomb survivor cancer mortality data. Dose-response : a publication of International Hormesis Society. 2012;10(4):584-92.

Doss M. Linear No-Threshold Model VS. Radiation Hormesis. Dose-response : a publication of International Hormesis Society. 2013;11:480-97.

Douglas H. Science, hormesis and regulation. *Human & experimental toxicology*. 2008;27(8):603-7.

Dragicevic M, Platisa J, Nikolic R, Todorovic S, Bogdanovic M, Mitic N, et al. Herbicide phosphinothricin causes direct stimulation hormesis. Dose-response : a publication of International Hormesis Society. 2012;11(3):344-60.

Dudekula N, Arora V, Callaerts-Vegh Z, Bond RA. The temporal hormesis of drug therapies. Dose-response : a publication of International Hormesis Society. 2006;3(3):414-24.

Duke SO. Hormesis with pesticides. Pest management science. 2014;70(5):689.

Duke SO. Phytotochemical phytotoxins and hormesis - a commentary. Dose-response : a publication of International Hormesis Society. 2010;9(1):76-8.

Eidus LK, Eidus VL. Problems of the mechanism of radiation and chemical hormesis. Radiatsionnaia biologii, radioecologii. 2001;41(5):627-30.

Eidus LK. On the mechanism of the nonspecific cell response to the action of damaging agents and the nature of hormesis. Biofizika. 2005;50(4):693-703.

Eisermann DJ, Wenzel U, Fitzenberger E. PEK-1 is crucial for hormesis induced by inhibition of the IRE-1/XBP-1 pathway in the *Caenorhabditis elegans* mev-1 mutant. Biochemical and biophysical research communications. 2016;473(4):1052-7.

Elliott K. Hormesis, ethics, and public policy: an overview. Human & experimental toxicology. 2008;27(8):659-62.

Elliott K. Respect for lay perceptions of risk in the hormesis case. Human & experimental toxicology. 2009;28(1):21-6.

Elliott KC. A case for deliberation in response to hormesis research. Human & experimental toxicology. 2008;27(7):529-38.

Ellman LM, Sunstein CR. Hormesis, the precautionary principle, and legal regulation. Human & experimental toxicology. 2004;23(12):601-11.

Elmazoglu Z, Yar Saglam AS, Sonmez C, Karasu C. Luteolin protects microglia against rotenone-induced toxicity in a hormetic manner through targeting oxidative stress response, genes associated with Parkinson's disease and inflammatory pathways. Drug and chemical toxicology. 2018:1-8.

Elnabarawy M. Commentary: role of hormesis in ecological risk assessment. Human & experimental toxicology. 2001;20(10):511; discussion 29-31.

Erofeeva EA. Hormesis and Paradoxical Effects of Drooping Birch (*Betula pendula* Roth) Parameters Under Motor Traffic Pollution. Dose-response : a publication of International Hormesis Society. 2015;13(2):1559325815588508.

Erofeeva EA. Hormesis and paradoxical effects of pea (*Pisum sativum* L.) parameters upon exposure to formaldehyde in a wide range of doses. *Ecotoxicology* (London, England). 2018;27(5):569-77.

Erofeeva EA. Hormesis and paradoxical effects of wheat seedling (*triticum aestivum* L.) parameters upon exposure to different pollutants in a wide range of doses. Dose-response : a publication of International Hormesis Society. 2014;12(1):121-35.

Erol A. JNK/FOXO may be key mechanistic pathway for the hormetic anti-aging. *Medical hypotheses*. 2007;68(4):923-4.

Fabre NT, Thieme K, Silva KS, Catanozi S, Cavaleiro AM, Pinto DAC, Jr., et al. Hormetic modulation of hepatic insulin sensitivity by advanced glycation end products. *Molecular and cellular endocrinology*. 2017;447:116-24.

Fan D, Han J, Chen Y, Zhu Y, Li P. Hormetic effects of Cd on alkaline phosphatase in soils across particle-size fractions in a typical coastal wetland. *The Science of the total environment*. 2018;613-614:792-7.

Feinendegen LE, Pollycove M. Biologic responses to low doses of ionizing radiation: detriment versus hormesis. Part 1. Dose responses of cells and tissues. *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*. 2001;42(7):17N-27N.

Feinendegen LE. Evidence for beneficial low level radiation effects and radiation hormesis. *The British journal of radiology*. 2005;78(925):3-7.

Feng W-B, Bong L-J, Dai S-M, Neoh K-B. Effect of imidacloprid exposure on life history traits in the agricultural generalist predator *Paederus* beetle: Lack of fitness cost but strong hormetic effect and skewed sex ratio. *Ecotoxicology and environmental safety*. 2019;174:390-400.

Fisher P. Does homeopathy have anything to contribute to hormesis? *Human & experimental toxicology*. 2010;29(7):555-60.

Fisher P. Homeopathy, hormesis, nanoparticles and nanostructures. *Homeopathy : the journal of the Faculty of Homeopathy*. 2015;104(2):67-8.

Fleischer G. Hearing mechanisms in dolphins and baleen whales (author's transl). *Hno*. 1982;30(4):123-30.

Flores FJ, Garzon CD. Detection and assessment of chemical hormesis on the radial growth in vitro of oomycetes and fungal plant pathogens. Dose-response : a publication of International Hormesis Society. 2012;11(3):361-73.

Flynn J, MacGregor D. Commentary on hormesis and public risk communication: is there a basis for public discussions? *Human & experimental toxicology*. 2003;22(1):31-4; discussion 43-9.

Foran J. Regulatory implications of hormesis. *Human & experimental toxicology*. 1998;17(8):441-3.

Forman HJ, Davies KJA, Ursini F. How do nutritional antioxidants really work: nucleophilic tone and para-hormesis versus free radical scavenging in vivo. *Free radical biology & medicine*. 2014;66:24-35.

Fosslien E. Hormetic electric field theory of pattern formation. *Dose-response : a publication of International Hormesis Society*. 2010;8(4):518-26.

Fosslien E. The hormetic morphogen theory of curvature and the morphogenesis and pathology of tubular and other curved structures. *Dose-response : a publication of International Hormesis Society*. 2009;7(4):307-31.

Fosslien E. Theoretical and experimental models of hormetic fusion tubulogenesis. *Dose-response : a publication of International Hormesis Society*. 2013;11(2):178-90.

Fouts JR. A NIEHS-oriented perspective on hormesis. *Critical reviews in toxicology*. 2003;33(3-4):425-9.

Friedman L, Gaines DW, Newell RF, Sager AO, Matthews RN, Braunberg RC. Body and organ growth of the developing Hormel-Hanford strain of male miniature swine. *Laboratory animals*. 1994;28(4):376-9.

Fu L, Li Q, Yan G, Zhou D, Crittenden JC. Hormesis effects of phosphorus on the viability of *Chlorella regularis* cells under nitrogen limitation. *Biotechnology for biofuels*. 2019;12:121.

Fukushima S, Kinoshita A, Puatanachokchai R, Kushida M, Wanibuchi H, Morimura K. Hormesis and dose-response-mediated mechanisms in carcinogenesis: evidence for a threshold in carcinogenicity of non-genotoxic carcinogens. *Carcinogenesis*. 2005;26(11):1835-45.

Furst A. Hormetic effects in pharmacology: pharmacological inversions as prototypes for hormesis. *Health physics*. 1987;52(5):527-30.

Galvez I, Torres-Piles S, Ortega-Rincon E. Balneotherapy, Immune System, and Stress Response: A Hormetic Strategy? *International journal of molecular sciences*. 2018;19(6).

Gaman L, Stoian I, Atanasiu V. Can ageing be slowed?: Hormetic and redox perspectives. *Journal of medicine and life*. 2011;4(4):346-51.

Gaya A, Akle CA, Mudan S, Grange J. The Concept of Hormesis in Cancer Therapy - Is Less More? *Cureus*. 2015;7(4):e261.

Gaylor D. Safety assessment with hormetic effects. *Human & experimental toxicology*. 1998;17(5):251-3.

Ge H-L, Liu S-S, Zhu X-W, Liu H-L, Wang L-J. Predicting hormetic effects of ionic liquid mixtures on luciferase activity using the concentration addition model. *Environmental science & technology*. 2011;45(4):1623-9.

Gems D, Partridge L. Stress-response hormesis and aging: "that which does not kill us makes us stronger". *Cell metabolism*. 2008;7(3):200-3.

Gentile JH. The implications of hormesis to ecotoxicology and ecological risk assessment (ERA). *Human & experimental toxicology*. 2001;20(10):513-5; discussion 29-31.

Gholami O. Umbelliprenin Mediates Its Apoptotic Effect by Hormesis: A Commentary. Dose-response : a publication of International Hormesis Society. 2017;15(2):1559325817710035.

Giesy JP. Hormesis--does it have relevance at the population, community or ecosystem levels of organization? *Human & experimental toxicology*. 2001;20(10):517-20; discussion 29-31.

Giordano J, Ives JA, Jonas WB. Hormetic responses in neural systems: consideration, contexts, and caveats. *Critical reviews in toxicology*. 2008;38(7):623-7.

Gofman JW. Cancer dose-response in A-bomb survivors: erroneous basis of Izatt's 'fairly conclusive evidence' for hormesis. *Health physics*. 1991;60(2):281-2.

Goldberg AA, Kyryakov P, Bourque SD, Titorenko VI. Xenohormetic, hormetic and cytostatic selective forces driving longevity at the ecosystemic level. *Aging*. 2010;2(8):461-70.

Goligorsky MS. Oxidative Stress and the Kidney: Riding on the Curve of Hormesis. *Antioxidants & redox signaling*. 2016;25(3):117-8.

Gomez-Perez A, Kyryakov P, Burstein MT, Asbah N, Noohi F, Iouk T, et al. Empirical Validation of a Hypothesis of the Hormetic Selective Forces Driving the Evolution of Longevity Regulation Mechanisms. *Frontiers in genetics*. 2016;7:216.

Gomez-Pinilla F. The influences of diet and exercise on mental health through hormesis. *Ageing research reviews*. 2008;7(1):49-62.

Gong Y, Xu B, Zhang Y, Gao X, Wu Q. Demonstration of an adaptive response to preconditioning *Frankliniella occidentalis* (Pergande) to sublethal

doses of spinosad: a hormetic-dose response. *Ecotoxicology* (London, England). 2015;24(5):1141-51.

Gongol B, Marin TL, Jeppson JD, Mayagoitia K, Shin S, Sanchez N, et al. Cellular hormetic response to 27-hydroxycholesterol promotes neuroprotection through AICD induction of MAST4 abundance and kinase activity. *Scientific reports*. 2017;7(1):13898.

Gori T, Munzel T. Biological effects of low-dose radiation: of harm and hormesis. *European heart journal*. 2012;33(3):292-5.

Goto S, Naito H, Kaneko T, Chung HY, Radak Z. Hormetic effects of regular exercise in aging: correlation with oxidative stress. *Applied physiology, nutrition, and metabolism = Physiologie appliquee, nutrition et metabolisme*. 2007;32(5):948-53.

Goto S, Radak Z. Hormetic effects of reactive oxygen species by exercise: a view from animal studies for successful aging in human. *Dose-response : a publication of International Hormesis Society*. 2009;8(1):68-72.

Govindan S, Amirthalingam M, Duraisamy K, Govindhan T, Sundararaj N, Palanisamy S. Phytochemicals-induced hormesis protects *Caenorhabditis elegans* against alpha-synuclein protein aggregation and stress through modulating HSF-1 and SKN-1/Nrf2 signaling pathways. *Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie*. 2018;102:812-22.

Gradari S, Palle A, McGreevy KR, Fontan-Lozano A, Trejo JL. Can Exercise Make You Smarter, Happier, and Have More Neurons? A Hormetic Perspective. *Frontiers in neuroscience*. 2016;10:93.

Gray G. Hormesis in Regulatory risk assessment - Science and Science Policy. *Dose-response : a publication of International Hormesis Society*. 2011;9(2):158-64.

Gray GM. Rodent cancer bioassays - is body weight depression hormetic? *Human & experimental toxicology*. 2000;19(6):332-4.

Gressel J, Dodds J. Commentary: Hormesis can be used in enhancing plant productivity and health; but not as previously envisaged. *Plant science : an international journal of experimental plant biology*. 2013;213:123-7.

Griffiths C. Economic implications of hormesis in policy making. *Human & experimental toxicology*. 2004;23(6):281-3; discussion 303-5.

Grone EF, Federico G, Nelson PJ, Arnold B, Grone H-J. The hormetic functions of Wnt pathways in tubular injury. *Pflugers Archiv : European journal of physiology*. 2017;469(7-8):899-906.

Grunwald S, Niedermeier J, Wenzel U. Hormesis is induced in the red flour beetle *Tribolium castaneum* through ingestion of charred toast. *European journal of nutrition*. 2015;54(4):535-41.

Guedes RNC, Cutler GC. Insecticide-induced hormesis and arthropod pest management. *Pest management science*. 2014;70(5):690-7.

Guedes RNC, Magalhaes LC, Cosme LV. Stimulatory sublethal response of a generalist predator to permethrin: hormesis, hormoligosis, or homeostatic regulation? *Journal of economic entomology*. 2009;102(1):170-6.

Guo L, Zhang X, Yang G, Huang L, Ma J. Hormesis and its application in medicinal plant growing. *Zhongguo Zhong yao za zhi = Zhongguo zhongyao zazhi = China journal of Chinese materia medica*. 2011;36(5):525-9.

Guo Z, Chen G, Zeng G, Huang Z, Chen A, Hu L, et al. Cysteine-induced hormesis effect of silver nanoparticles. *Toxicology research*. 2016;5(5):1268-72.

Hadacek F, Bachmann G, Engelmeier D, Chobot V. Hormesis and a Chemical Raison D'etre for Secondary Plant Metabolites. Dose-response : a publication of International Hormesis Society. 2010;9(1):79-116.

Haddi K, Mendes MV, Barcellos MS, Lino-Neto J, Freitas HL, Guedes RNC, et al. Sexual Success after Stress? Imidacloprid-Induced Hormesis in Males of the Neotropical Stink Bug *Euschistus heros*. *PloS one*. 2016;11(6):e0156616.

Haddi K, Oliveira EE, Faroni LRA, Guedes DC, Miranda NNS. Sublethal Exposure to Clove and Cinnamon Essential Oils Induces Hormetic-Like Responses and Disturbs Behavioral and Respiratory Responses in *Sitophilus zeamais* (Coleoptera: Curculionidae). *Journal of economic entomology*. 2015;108(6):2815-22.

Hamel P, Abed E, Brissette L, Moreau R. Characterization of oxidized low-density lipoprotein-induced hormesis-like effects in osteoblastic cells. *American journal of physiology Cell physiology*. 2008;294(4):C1021-33.

Hammerl H, Pichler O. On the treatment of arteriosclerosis with a hormone combination (Gero-Hormetten) and its influence on serum lipids. *Munchener medizinische Wochenschrift (1950)*. 1961;103:1727-9.

Hammit JK. Economic implications of hormesis. *Human & experimental toxicology*. 2004;23(6):267-78; discussion 79-80, 303-5.

Han J, Wang S, Fan D, Guo Y, Liu C, Zhu Y. Time-Dependent Hormetic Response of Soil Alkaline Phosphatase Induced by Cd and the Association with Bacterial Community Composition. *Microbial ecology*. 2019.

Hanekamp JC, Bast A. Hormesis in precautionary regulatory culture: models preferences and the advancement of science. *Human & experimental toxicology*. 2007;26(11):855-73.

Hanekamp JC, Calabrese EJ. Chloramphenicol, European legislation and hormesis commentary. Dose-response : a publication of International Hormesis Society. 2006;5(2):91-3.

Hansson S. Ethical principles for hormesis policies. *Human & experimental toxicology*. 2008;27(8):609-12.

Hao C, Hao W. Role of ERK in the hormesis induced by cadmium chloride in HEK293 cells. *Wei sheng yan jiu = Journal of hygiene research*. 2011;40(4):517-22.

Harding LE. Non-linear uptake and hormesis effects of selenium in red-winged blackbirds (*Agelaius phoeniceus*). *The Science of the total environment*. 2008;389(2-3):350-66.

Harrison MC. A possible path forward for hormesis. *Critical reviews in toxicology*. 2001;31(4-5):653-4.

Hartwig K, Heidler T, Moch J, Daniel H, Wenzel U. Feeding a ROS-generator to *Caenorhabditis elegans* leads to increased expression of small heat shock protein HSP-16.2 and hormesis. *Genes & nutrition*. 2009;4(1):59-67.

Hashmi MZ, Khan KY, Hu J, Naveedullah, Su X, Abbas G, et al. Hormetic effects of noncoplanar PCB exposed to human lung fibroblast cells (HELFI) and possible role of oxidative stress. *Environmental toxicology*. 2015;30(12):1385-92.

Hashmi MZ, Naveedullah, Shen C, Yu C. Hormetic Responses of Food-Supplied Pcb 31 to Zebrafish (*Danio Rerio*) Growth. Dose-response : a publication of International Hormesis Society. 2015;13(1).

Hashmi MZ, Naveedullah, Shen H, Zhu S, Yu C, Shen C. Growth, bioluminescence and shoal behavior hormetic responses to inorganic and/or organic chemicals: a review. *Environment international*. 2014;64:28-39.

Hastings KL. Commentary on hormetic dose-response relationships in immunology: occurrence, quantitative features of the dose response, mechanistic foundations, and clinical implications. *Critical reviews in toxicology*. 2005;35(2-3):297-8.

Hattori S. Current status and perspectives of research on radiation hormesis in Japan. *Chinese medical journal*. 1994;107(6):420-4.

Hayes DP. Adverse effects of nutritional inadequacy and excess: a hormetic model. *The American journal of clinical nutrition*. 2008;88(2):578S-81S.

Hayes DP. Commentary on 'resveratrol commonly displays hormesis: occurrence and biomedical significance'. *Human & experimental toxicology*. 2010;29(12):1018-20.

Hayes DP. Nutritional hormesis and aging. Dose-response : a publication of International Hormesis Society. 2009;8(1):10-5.

Hayes DP. Nutritional hormesis. *European journal of clinical nutrition*. 2007;61(2):147-59.

Hayflick L. Hormesis, aging and longevity determination. *Human & experimental toxicology*. 2001;20(6):289-91; discussion 319-20.

Heinz GH, Hoffman DJ, Klimstra JD, Stebbins KR, Kondrad SL, Erwin CA. Hormesis associated with a low dose of methylmercury injected into mallard eggs. *Archives of environmental contamination and toxicology*. 2012;62(1):141-4.

Heinz GH, Hoffman DJ, Klimstra JD, Stebbins KR. Enhanced reproduction in mallards fed a low level of methylmercury: an apparent case of hormesis. *Environmental toxicology and chemistry*. 2010;29(3):650-3.

Heinzerling L, Lechleider RJ. Hormesis and the law. *Human & experimental toxicology*. 2001;20(3):154-5.

Helmcke KJ, Aschner M. Hormetic effect of methylmercury on *Caenorhabditis elegans*. *Toxicology and applied pharmacology*. 2010;248(2):156-64.

Henry Y, Renault D, Colinet H. Correction: Hormesis-like effect of mild larval crowding on thermotolerance in *Drosophila* flies (doi: 10.1242/jeb.169342). *The Journal of experimental biology*. 2018;221(Pt 3).

Henry Y, Renault D, Colinet H. Hormesis-like effect of mild larval crowding on thermotolerance in *Drosophila* flies. *The Journal of experimental biology*. 2018;221(Pt 2).

Henschler D. The origin of hormesis: historical background and driving forces. *Human & experimental toxicology*. 2006;25(7):347-51.

Hercus M, Loeschke V. Comments to paper by S. Rattan: applying hormesis in aging research and therapy--a perspective from evolutionary biology. *Human & experimental toxicology*. 2001;20(6):305-8; discussion 19-20.

Hercus MJ, Loeschcke V, Rattan SIS. Lifespan extension of *Drosophila melanogaster* through hormesis by repeated mild heat stress. *Biogerontology*. 2003;4(3):149-56.

Hickey RJ, Bowers EJ, Clelland RC. Radiation hormesis, public health, and public policy: a commentary. *Health physics*. 1983;44(3):207-19.

Hickey RJ, Clelland RC, Bowers EJ. More comments on radiation hormesis, epidemiology and public health. *Health physics*. 1984;46(5):1159-60.

Hipkiss AR. Dietary restriction, glycolysis, hormesis and ageing. *Biogerontology*. 2007;8(2):221-4.

Hoffmann G, Stempsey W. The hormesis concept and risk assessment: are there unique ethical and policy considerations? *Human & experimental toxicology*. 2008;27(8):613-20.

Hoffmann GR. A perspective on the scientific, philosophical, and policy dimensions of hormesis. *Dose-response : a publication of International Hormesis Society*. 2009;7(1):1-51.

Hoffmann GR. Letter to the editor on ethics of expertise, informed consent, and hormesis. *Science and engineering ethics*. 2007;13(2):135-7.

Holladay SD, Ehrich M, Gogal RM, Jr. Commentary on hormetic dose-response relationships in immunology: occurrence, quantitative features of the dose response, mechanistic foundations, and clinical implications. *Critical reviews in toxicology*. 2005;35(2-3):299-302.

Holzman D. Hormesis: fact or fiction? *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*. 1995;36(12):13N-4N, 6N.

Hood WR, Zhang Y, Mowry AV, Hyatt HW, Kavazis AN. Life History Trade-offs within the Context of Mitochondrial Hormesis. *Integrative and comparative biology*. 2018;58(3):567-77.

Horne BD, Muhlestein JB, Anderson JL. Health effects of intermittent fasting: hormesis or harm? A systematic review. *The American journal of clinical nutrition*. 2015;102(2):464-70.

Hsieh S-Y, Hsu C-Y, He J-R, Liu C-L, Lo S-J, Chen Y-C, et al. Identifying apoptosis-evasion proteins/pathways in human hepatoma cells via induction of cellular hormesis by UV irradiation. *Journal of proteome research*. 2009;8(8):3977-86.

Hsu M-F, Yu S-H, Korivi M, Jean W-H, Lee S-D, Huang C-Y, et al. Hormetic Property of Ginseng Steroids on Anti-Oxidant Status against Exercise Challenge in Rat Skeletal Muscle. *Antioxidants* (Basel, Switzerland). 2017;6(2).

Huang H-Y, Liu J-J, Xi R-R, Xing X-M, Yuan J-H, Yang L-Q, et al. An investigation of hormesis of trichloroethylene in L-02 liver cells by differential proteomic analysis. *Molecular biology reports*. 2009;36(8):2119-29.

Huilgol NG. Hormesis: a peep in to the human nature. *Journal of cancer research and therapeutics*. 2012;8(2):175.

Hunt D, Rai SN. Testing threshold and hormesis in a random effects dose-response model applied to developmental toxicity data. *Biometrical journal Biometrische Zeitschrift*. 2005;47(3):319-28.

Hunt D. Dose and litter allocations in the design of teratological studies for detecting hormesis. *Teratology*. 2002;66(6):309-14.

Hunt DL, Bowman D. A parametric model for detecting hormetic effects in developmental toxicity studies. *Risk analysis : an official publication of the Society for Risk Analysis*. 2004;24(1):65-72.

Hunt PR, Son TG, Wilson MA, Yu Q-S, Wood WH, Zhang Y, et al. Extension of lifespan in *C. elegans* by naphthoquinones that act through stress hormesis mechanisms. *PloS one*. 2011;6(7):e21922.

Iavicoli I, Calabrese EJ, Nascarella MA. Exposure to nanoparticles and hormesis. *Dose-response : a publication of International Hormesis Society*. 2010;8(4):501-17.

Iavicoli I, Carelli G. Potential role of hormesis in risk assessment in occupational toxicology. *Giornale italiano di medicina del lavoro ed ergonomia*. 2003;25 Suppl(3):174-5.

Iavicoli I, Fontana L, Leso V, Calabrese EJ. Hormetic dose-responses in nanotechnology studies. *The Science of the total environment*. 2014;487:361-74.

Iavicoli I, Leso V, Fontana L, Calabrese EJ. Nanoparticle Exposure and Hormetic Dose-Responses: An Update. *International journal of molecular sciences*. 2018;19(3).

Isakov IV, Karlov VA. The topical diagnostic and prognostic value of the hormetonia syndrome in cranio-cerebral injuries. *Zhurnal nevropatologii i psikhatrii imeni SS Korsakova* (Moscow, Russia : 1952). 1971;71(3):344-8.

Israel Y, Rivera-Meza M, Quintanilla ME, Sapag A, Tampier L. Acetaldehyde burst protection of ADH1B*2 against alcoholism: an additional

hormesis protection against esophageal cancers following alcohol consumption? Alcoholism, clinical and experimental research. 2011;35(5):806-10.

Ivanovskii IA. Radiation hormesis, radiation stimulation or hyperfunctional effect of ionizing radiation? Radiatsionnaia biologii, radioecologii. 1993;33(5):760-4.

Iwasaka K, Hemmi E, Tomita K, Ishihara S, Katayama T, Sakagami H. Effect of CO₂ laser irradiation on hormesis induction in human pulp and periodontal ligament fibroblasts. In vivo (Athens, Greece). 2011;25(5):787-93.

Iwasaka K, Tomita K, Ozawa Y, Katayama T, Sakagami H. Effect of CO₂ laser irradiation on hormesis induction in cultured oral cells. In vivo (Athens, Greece). 2011;25(1):93-8.

Jager T, Barsi A, Ducrot V. Hormesis on life-history traits: is there such thing as a free lunch? Ecotoxicology (London, England). 2013;22(2):263-70.

Jang TY, Jung A-Y, Kim YH. Hormetic Effect of Chronic Hypergravity in a Mouse Model of Allergic Asthma and Rhinitis. Scientific reports. 2016;6:27260.

Jargin SV. Hormesis and homeopathy: The artificial twins. Journal of intercultural ethnopharmacology. 2015;4(1):74-7.

Jargin SV. Hormesis and radiation safety norms. Human & experimental toxicology. 2012;31(7):671-5.

Jargin SV. Hormesis and radiation safety norms: Comments for an update. Human & experimental toxicology. 2018;37(11):1233-43.

Jargin SV. Hormesis: umbrella mechanism only for agents present in the environment. Human & experimental toxicology. 2015;34(4):439-41.

Jargin SV. Hormetic use of stress in gerontological interventions requires a cautious approach. Biogerontology. 2016;17(2):417-20.

Jaworowski Z. Radiation hormesis--a remedy for fear. Human & experimental toxicology. 2010;29(4):263-70.

Jayjock MA, Lewis PG. Implications of hormesis for industrial hygiene. Human & experimental toxicology. 2002;21(7):385-9.

Jayjock MA. How much is enough to accept hormesis as the default? or 'At what point, if ever, could/should hormesis be employed as the principal dose-response default assumption in risk assessment?'. Human & experimental toxicology. 2005;24(5):245-7.

Ji LL, Dickman JR, Kang C, Koenig R. Exercise-induced hormesis may help healthy aging. Dose-response : a publication of International Hormesis Society. 2010;8(1):73-9.

Ji LL, Gomez-Cabrera M-C, Vina J. Exercise and hormesis: activation of cellular antioxidant signaling pathway. Annals of the New York Academy of Sciences. 2006;1067:425-35.

Ji LL, Kang C, Zhang Y. Exercise-induced hormesis and skeletal muscle health. Free radical biology & medicine. 2016;98:113-22.

Jia L, He X, Chen W, Liu Z, Huang Y, Yu S. Hormesis phenomena under Cd stress in a hyperaccumulator--*Lonicera japonica* Thunb. Ecotoxicology (London, England). 2013;22(3):476-85.

Jia L, Liu Z-L, Chen W, H E X-Y, Q I D. Hormesis effect of cadmium on *Lonicera japonica*. Ying yong sheng tai xue bao = The journal of applied ecology. 2013;24(4):935-40.

Jiao Z-H, Li M, Feng Y-X, Shi J-C, Zhang J, Shao B. Hormesis effects of silver nanoparticles at non-cytotoxic doses to human hepatoma cells. PloS one. 2014;9(7):e102564.

Johansson L. Hormesis, an update of the present position. European journal of nuclear medicine and molecular imaging. 2003;30(6):921-33.

Johnson TE, Bruunsgaard H. Implications of hormesis for biomedical aging research. Human & experimental toxicology. 1998;17(5):263-5.

Jolly D, Meyer J. A brief review of radiation hormesis. Australasian physical & engineering sciences in medicine. 2009;32(4):180-7.

Jonas WB, Ives JA. Should we explore the clinical utility of hormesis? Human & experimental toxicology. 2008;27(2):123-7.

Jonas WB. A critique of "the scientific foundations of hormesis". Critical reviews in toxicology. 2001;31(4-5):625-9.

Jonas WB. The future of hormesis: what is the clinical relevance to hormesis? Critical reviews in toxicology. 2001;31(4-5):655-8.

Juhasz B, Mukherjee S, Das DK. Hormetic response of resveratrol against cardioprotection. Experimental and clinical cardiology. 2010;15(4):e134-8.

Jun JE, Kim TH, Lee S-E, Lee Y-B, Jee JH, Bae JC, et al. Hormetic effect of triiodothyronine in metabolically healthy obese persons. Endocrine. 2017;57(3):418-27.

Juni RL, McElveen JC, Jr. Environmental law applications of hormesis concepts: risk assessment and cost-benefit implications. *Journal of applied toxicology : JAT*. 2000;20(2):149-55.

Juni RL. Hormesis and toxic torts: traditional torts and claims for subclinical harm. *Human & experimental toxicology*. 2008;27(2):109-12.

Justin-Besancon L, Lamotte M, Lamotte-Barrillon S. Cortical hormones & primary metabolism. *Strasbourg medical*. 1958;9(5):365-72.

Kafi Z, Cheshomi H, Gholami O. 7-Isopentenylcoumarin, Arctigenin, and Hesperidin Modify Myeloid Cell Leukemia Type-1 (Mcl-1) Gene Expression by Hormesis in K562 Cell Line. Dose-response : a publication of International Hormesis Society. 2018;16(3):1559325818796014.

Kahn A, Olsen A. Stress to the rescue: is hormesis a 'cure' for aging? Dose-response : a publication of International Hormesis Society. 2009;8(1):48-52.

Kaiser J. Hormesis. A healthful dab of radiation? *Science (New York, NY)*. 2003;302(5644):378.

Kaiser J. Hormesis. Sipping from a poisoned chalice. *Science (New York, NY)*. 2003;302(5644):376-9.

Kantoh K, Ono M, Nakamura Y, Nakamura Y, Hashimoto K, Sakagami H, et al. Hormetic and anti-radiation effects of tropolone-related compounds. *In vivo (Athens, Greece)*. 2010;24(6):843-51.

Karlov VA, Karakhan VB. Hormetonia in cranio-cerebral injury (review of the literature). *Zhurnal nevropatologii i psikhatrii imeni SS Korsakova (Moscow, Russia : 1952)*. 1977;77(5):759-64.

Kastin AJ, Pan W. Peptides and hormesis. *Critical reviews in toxicology*. 2008;38(7):629-31.

Kato H. Comment to Dr. Delpla's 'Let Us Come Back to Radiation Hormesis. *Health physics*. 1989;57(1):205.

Keenan KP. BELLE newsletter commentary: does caloric restriction induce hormesis? *Human & experimental toxicology*. 2000;19(6):335-7.

Kefford BJ, Zaluzniak L, Warne MSJ, Nugegoda D. Is the integration of hormesis and essentiality into ecotoxicology now opening Pandora's Box? *Environmental pollution (Barking, Essex : 1987)*. 2008;151(3):516-23.

Kendig EL, Le HH, Belcher SM. Defining hormesis: evaluation of a complex concentration response phenomenon. *International journal of toxicology*. 2010;29(3):235-46.

Kharroubi W, Ahmed SH, Nury T, Andreoletti P, Haouas Z, Zarrouk A, et al. Evidence of hormesis on human neuronal SK-N-BE cells treated with sodium arsenate: impact at the mitochondrial level. *Environmental science and pollution research international*. 2016;23(9):8441-52.

Kim S-A, Lee Y-M, Choi J-Y, Jacobs DR, Jr., Lee D-H. Evolutionarily adapted hormesis-inducing stressors can be a practical solution to mitigate harmful effects of chronic exposure to low dose chemical mixtures. *Environmental pollution (Barking, Essex : 1987)*. 2018;233:725-34.

Kim SB, Bartell SM, Gillen DL. Estimation of a benchmark dose in the presence or absence of hormesis using posterior averaging. *Risk analysis : an official publication of the Society for Risk Analysis*. 2015;35(3):396-408.

Kim SB, Bartell SM, Gillen DL. Inference for the existence of hormetic dose-response relationships in toxicology studies. *Biostatistics (Oxford, England)*. 2016;17(3):523-36.

Kim SB, Sanders N. Model Averaging with AIC Weights for Hypothesis Testing of Hormesis at Low Doses. *Dose-response : a publication of International Hormesis Society*. 2017;15(2):1559325817715314.

Kinoshita A, Wanibuchi H, Morimura K, Wei M, Shen J, Imaoka S, et al. Phenobarbital at low dose exerts hormesis in rat hepatocarcinogenesis by reducing oxidative DNA damage, altering cell proliferation, apoptosis and gene expression. *Carcinogenesis*. 2003;24(8):1389-99.

Kirkwood TB, Shanley DP. Caloric restriction, hormesis and life history plasticity. *Human & experimental toxicology*. 2000;19(6):338-9.

Kitchin KT, Drane JW. A critique of the use of hormesis in risk assessment. *Human & experimental toxicology*. 2005;24(5):249-53.

Kitchin KT. Defining, explaining and understanding hormesis. *Human & experimental toxicology*. 2002;21(2):105-6; discussion 13-4.

Klaunig JE. Cancer biology and hormesis: commentary. *Critical reviews in toxicology*. 2005;35(6):593-4.

Kohn HW. Comments on radiation, hormesis, epidemiology and public policy. *Health physics*. 1984;46(5):1158-9.

Kolacz JW, Wescott RB, Dommert AR. Influence of age and rations on fecal microflora of Hormel miniature swine. *American journal of veterinary research*. 1971;32(4):597-602.

Kolacz JW, Wescott RB, Dommert AR. Microflora of Hormel miniature swine: fecal flora of adult sows. *American journal of veterinary research*. 1970;31(7):1173-8.

Kolb H, Eizirik DL. Resistance to type 2 diabetes mellitus: a matter of hormesis? *Nature reviews Endocrinology*. 2011;8(3):183-92.

Kondo S. Altruistic cell suicide in relation to radiation hormesis. *International journal of radiation biology and related studies in physics, chemistry, and medicine*. 1988;53(1):95-102.

Kondo S. Hormetic effects on human cancer mortality are inducible only after long-term irradiation at low dose rates. *Health physics*. 2011;100(3):340-1.

Koppenol WH, Bounds PL. *Hormesis*. Science (New York, NY). 1989;246(4928):311.

Kopylov VA, Revin AF, Kuzin AM. The display of hormesis in the action of quinoid radiotoxins. *Radiobiologiya*. 1993;33(3):347-52.

Koshy L, Jones T, BeruBe K. Bioreactivity of municipal solid waste landfill leachates-Hormesis and DNA damage. *Water research*. 2008;42(8-9):2177-83.

Kouda K, Iki M. Beneficial effects of mild stress (hormetic effects): dietary restriction and health. *Journal of physiological anthropology*. 2010;29(4):127-32.

Kozłowski L, Garvis S, Bedet C, Palladino F. The *Caenorhabditis elegans* HP1 family protein HPL-2 maintains ER homeostasis through the UPR and hormesis. *Proceedings of the National Academy of Sciences of the United States of America*. 2014;111(16):5956-61.

Kozumbo WJ, Calabrese EJ. Two decades (1998-2018) of research Progress on Hormesis: advancing biological understanding and enabling novel applications. *Journal of cell communication and signaling*. 2019.

Kraig RP, Mitchell HM, Christie-Pope B, Kunkler PE, White DM, Tang Y-P, et al. TNF-alpha and Microglial Hormetic Involvement in Neurological Health & Migraine. Dose-response : a publication of International Hormesis Society. 2010;8(4):389-413.

Krakoff LR. Combined blockade of the renin system: an example of hormesis. *Journal of clinical hypertension (Greenwich, Conn)*. 2012;14(9):573-4.

Kraska A, Bilski B. Exposure of healthcare personnel to ionizing radiation in the light of radiation hormesis hypothesis. *Medycyna pracy*. 2012;63(3):371-6.

Kudryasheva NS, Rozhko TV. Effect of low-dose ionizing radiation on luminous marine bacteria: radiation hormesis and toxicity. *Journal of environmental radioactivity*. 2015;142:68-77.

Kumar A, Yerra VG, Malik RA. Comment on Sharma. Mitochondrial Hormesis and Diabetic Complications. *Diabetes* 2015;64:663-672. *Diabetes*. 2015;64(9):e32-3; discussion e4.

Kumsta C, Chang JT, Schmalz J, Hansen M. Hormetic heat stress and HSF-1 induce autophagy to improve survival and proteostasis in *C. elegans*. *Nature communications*. 2017;8:14337.

Kumsta C, Hansen M. Hormetic heat shock and HSF-1 overexpression improve *C. elegans* survival and proteostasis by inducing autophagy. *Autophagy*. 2017;13(6):1076-7.

Kuzin AM, Ruda VP, Mozgovoï EG. The role of receptors in radiation hormesis. *Radiation and environmental biophysics*. 1991;30(4):259-66.

Kuzin AM. The key mechanisms of radiation hormesis. *Izvestiia Akademii nauk Seriia biologicheskaiia*. 1993(6):824-32.

Kyriazis M. Clinical anti-aging hormetic strategies. *Rejuvenation research*. 2005;8(2):96-100.

Kyriazis M. Neurons vs. Germline: A War of Hormetic Tradeoffs. *Current aging science*. 2017;10(4):242-5.

Kyriazis M. Nonlinear stimulation and hormesis in human aging: practical examples and action mechanisms. *Rejuvenation research*. 2010;13(4):445-52.

Ladics GS, Loveless SE. Commentary on hormetic dose-response relationships in immunology: occurrence, quantitative features of the dose response, mechanistic foundations, and clinical implications. *Critical reviews in toxicology*. 2005;35(2-3):303-4.

Lagisz M, Hector KL, Nakagawa S. Life extension after heat shock exposure: assessing meta-analytic evidence for hormesis. *Ageing research reviews*. 2013;12(2):653-60.

Lajqi T, Stojiljkovic M, Wetzker R. Toxin-induced hormesis may restrain aging. *Biogerontology*. 2019.

Lam PY, Ko KM. Schisandrin B as a hormetic agent for preventing age-related neurodegenerative diseases. *Oxidative medicine and cellular longevity*. 2012;2012:250825.

Lathrop ML. Comments on 'hormesis and toxic torts'. Human & experimental toxicology. 2008;27(2):113; discussion 9-20.

Latin HA. Regulatory implementation and indeterminate hormesis effects. Human & experimental toxicology. 2001;20(3):139-42.

Laughlin RB, Jr., Ng J, Guard HE. Hormesis: a response to low environmental concentrations of petroleum hydrocarbons. Science (New York, NY). 1981;211(4483):705-7.

Lave LB. Hormesis: implications for public policy regarding toxicants. Annual review of public health. 2001;22:63-7.

Lave LB. Hormesis: policy implications. Journal of applied toxicology : JAT. 2000;20(2):141-5.

Le Bourg E, Rattan SIS. "Is hormesis applicable as a pro-healthy aging intervention in mammals and human beings, and how?" Introduction to a special issue of Dose-Response. Dose-response : a publication of International Hormesis Society. 2009;8(1):1-3.

Le Bourg E, Rattan SIS. Hormesis and trade-offs: a comment. Dose-response : a publication of International Hormesis Society. 2014;12(4):522-4.

Le Bourg E. Applying hormesis in aging research and therapy: a sensible hope? Human & experimental toxicology. 2001;20(6):297-9; discussion 319-20.

Le Bourg E. Delaying aging: could the study of hormesis be more helpful than that of the genetic pathway used to survive starvation? Biogerontology. 2003;4(5):319-24.

Le Bourg E. Fasting and other mild stresses with hormetic effects in *Drosophila melanogaster* can additively increase resistance to cold. Biogerontology. 2015;16(4):517-27.

Le Bourg E. Hormesis, aging and longevity. Biochimica et biophysica acta. 2009;1790(10):1030-9.

Le Bourg E. Hormetic effects of repeated exposures to cold at young age on longevity, aging and resistance to heat or cold shocks in *Drosophila melanogaster*. Biogerontology. 2007;8(4):431-44.

Le Bourg E. Hormetic effects on longevity of hydrogen peroxide in *Drosophila melanogaster* flies living on a poorly nutritious medium. Biogerontology. 2007;8(3):327-44.

Le Bourg E. Hormetic protection of *Drosophila melanogaster* middle-aged male flies from heat stress by mildly stressing them at young age. *Die Naturwissenschaften*. 2005;92(6):293-6.

Lee D-H, Jacobs DR, Jr. Hormesis and public health: can glutathione depletion and mitochondrial dysfunction due to very low-dose chronic exposure to persistent organic pollutants be mitigated? *Journal of epidemiology and community health*. 2015;69(3):294-300.

Lefcort H, Freedman Z, House S, Pendleton M. Hormetic effects of heavy metals in aquatic snails: is a little bit of pollution good? *EcoHealth*. 2008;5(1):10-7.

Lehrer S, Rosenzweig KE. Lung cancer hormesis in high impact states where nuclear testing occurred. *Clinical lung cancer*. 2015;16(2):152-5.

Leite GLD, de Paulo PD, Zanuncio JC, Tavares WDS, Alvarenga AC, Dourado LR, et al. Herbicide toxicity, selectivity and hormesis of nicosulfuron on 10 Trichogrammatidae (Hymenoptera) species parasitizing *Anagasta* (= *Ephestia*) *kuehniella* (Lepidoptera: Pyralidae) eggs. *Journal of environmental science and health Part B, Pesticides, food contaminants, and agricultural wastes*. 2017;52(1):70-6.

Leite GLD, de Paulo PD, Zanuncio JC, Tavares WdS, Alvarenga AC, Dourado LR, et al. Nicosulfuron Plus Atrazine Herbicides and Trichogrammatidae (Hymenoptera) in No-Choice Test: Selectivity and Hormesis. *Bulletin of environmental contamination and toxicology*. 2017;99(5):589-94.

Leong PK, Chen N, Ko KM. Mitochondrial decay in ageing: 'Qi-invigorating' schisandrin B as a hormetic agent for mitigating age-related diseases. *Clinical and experimental pharmacology & physiology*. 2012;39(3):256-64.

Leow S-S, Luu A, Shrestha S, Hayes KC, Sambanthamurthi R. *Drosophila* larvae fed palm fruit juice (PFJ) delay pupation via expression regulation of hormetic stress response genes linked to ageing and longevity. *Experimental gerontology*. 2018;106:198-221.

Leroy M, Mosser T, Maniere X, Alvarez DF, Matic I. Pathogen-induced *Caenorhabditis elegans* developmental plasticity has a hormetic effect on the resistance to biotic and abiotic stresses. *BMC evolutionary biology*. 2012;12:187.

Lettieri Barbato D, Tatulli G, Aquilano K, Ciriolo MR. Mitochondrial Hormesis links nutrient restriction to improved metabolism in fat cell. *Aging*. 2015;7(10):869-81.

Li G, He H. Hormesis, allostatic buffering capacity and physiological mechanism of physical activity: a new theoretic framework. *Medical hypotheses*. 2009;72(5):527-32.

Li N, Stojanovski S, Maechler P. Mitochondrial hormesis in pancreatic beta cells: does uncoupling protein 2 play a role? *Oxidative medicine and cellular longevity*. 2012;2012:740849.

Li S, Tan Y. Hormetic response of cholinesterase from *Daphnia magna* in chronic exposure to triazophos and chlorpyrifos. *Journal of environmental sciences (China)*. 2011;23(5):852-9.

Li W, Wang G, Cui J, Xue L, Cai L. Low-dose radiation (LDR) induces hematopoietic hormesis: LDR-induced mobilization of hematopoietic progenitor cells into peripheral blood circulation. *Experimental hematology*. 2004;32(11):1088-96.

Lindsay DG. Commentary on 'resveratrol commonly displays hormesis: occurrence and biomedical significance'. *Human & experimental toxicology*. 2010;29(12):1024-5.

Lindsay DG. Nutrition, hormetic stress and health. *Nutrition research reviews*. 2005;18(2):249-58.

Lithgow GJ. Hormesis--a new hope for ageing studies or a poor second to genetics? *Human & experimental toxicology*. 2001;20(6):301-3; discussion 19-20.

Liu G, Gong P, Bernstein LR, Bi Y, Gong S, Cai L. Apoptotic cell death induced by low-dose radiation in male germ cells: hormesis and adaptation. *Critical reviews in toxicology*. 2007;37(7):587-605.

Liu L, Huang W, Wang J, Song H, Cen J, Ji B. Anthraquinone derivative exerted hormetic effect on the apoptosis in oxygen-glucose deprivation-induced PC12 cells via ERK and Akt activated Nrf2/HO-1 signaling pathway. *Chemico-biological interactions*. 2017;262:1-11.

Liu SZ, Liu WH, Sun JB. Radiation hormesis: its expression in the immune system. *Health physics*. 1987;52(5):579-83.

Liu S-Z. On radiation hormesis expressed in the immune system. *Critical reviews in toxicology*. 2003;33(3-4):431-41.

Liu SZ. Radiation hormesis. A new concept in radiological science. *Chinese medical journal*. 1989;102(10):750-5.

Liu Y, Chen X, Duan S, Feng Y, An M. Mathematical modeling of plant allelopathic hormesis based on ecological-limiting-factor models. Dose-response : a publication of International Hormesis Society. 2010;9(1):117-29.

Liu Y, Chen X, Zhang J, Gao B. Hormesis effects of amoxicillin on growth and cellular biosynthesis of *Microcystis aeruginosa* at different nitrogen levels. *Microbial ecology*. 2015;69(3):608-17.

Liu Y, Wu Z, Feng S, Yang X, Huang D. Hormesis of glyceollin I, an induced phytoalexin from soybean, on budding yeast chronological lifespan extension. *Molecules (Basel, Switzerland)*. 2014;19(1):568-80.

Liu Z, Chen W, He X, Jia L, Yu S, Zhao M. Hormetic Responses of *Lonicera Japonica* Thunb. To Cadmium Stress. Dose-response : a publication of International Hormesis Society. 2015;13(1).

Loenneke JP, Thiebaud RS, Abe T, Bemben MG. Blood flow restriction pressure recommendations: the hormesis hypothesis. *Medical hypotheses*. 2014;82(5):623-6.

Lofstedt R. Hormesis and risk communication: a comment to Ortwin Renn. *Human & experimental toxicology*. 2003;22(1):35-7; discussion 43-9.

Loken MK, Feinendegen LE. Radiation hormesis. Its emerging significance in medical practice. *Investigative radiology*. 1993;28(5):446-50.

Lopez-Diazguerrero NE, Gonzalez Puertos VY, Hernandez-Bautista RJ, Alarcon-Aguilar A, Luna-Lopez A, Konigsberg Fainstein M. Hormesis: What doesn't kill you makes you stronger. *Gaceta medica de Mexico*. 2013;149(4):438-47.

Lopez-Martinez G, Hahn DA. Early life hormetic treatments decrease irradiation-induced oxidative damage, increase longevity, and enhance sexual performance during old age in the Caribbean fruit fly. *PloS one*. 2014;9(1):e88128.

Lopez-Martinez G, Hahn DA. Short-term anoxic conditioning hormesis boosts antioxidant defenses, lowers oxidative damage following irradiation and enhances male sexual performance in the Caribbean fruit fly, *Anastrepha suspensa*. *The Journal of experimental biology*. 2012;215(Pt 12):2150-61.

Lu X, He S, Ma H, Li J, Zhu F. Hormetic Effects of Flusilazole Preconditioning on Mycelial Growth and Virulence of *Sclerotinia sclerotiorum*. *Plant disease*. 2018;102(6):1165-70.

Luckey TD. Radiation hormesis: the good, the bad, and the ugly. Dose-response : a publication of International Hormesis Society. 2006;4(3):169-90.

Ludovico P, Burhans WC. Reactive oxygen species, ageing and the hormesis police. *FEMS yeast research*. 2014;14(1):33-9.

Lukey TD. Radiation hormesis in cancer mortality. *Chinese medical journal*. 1994;107(8):627-30.

Luna-Lopez A, Gonzalez-Puertos VY, Lopez-Diazguerrero NE, Konigsberg M. New considerations on hormetic response against oxidative stress. *Journal of cell communication and signaling*. 2014;8(4):323-31.

Luna-Lopez A, Gonzalez-Puertos VY, Romero-Ontiveros J, Ventura-Gallegos JL, Zentella A, Gomez-Quiroz LE, et al. A noncanonical NF-kappaB pathway through the p50 subunit regulates Bcl-2 overexpression during an oxidative-conditioning hormesis response. *Free radical biology & medicine*. 2013;63:41-50.

Luna-Lopez A, Triana-Martinez F, Lopez-Diazguerrero NE, Ventura-Gallegos JL, Gutierrez-Ruiz MC, Damian-Matsumura P, et al. Bcl-2 sustains hormetic response by inducing Nrf-2 nuclear translocation in L929 mouse fibroblasts. *Free radical biology & medicine*. 2010;49(7):1192-204.

Lundqvist J, Helmersson E, Oskarsson A. Hormetic Dose Response of NaAsO₂ on Cell Proliferation of Prostate Cells in Vitro: Implications for Prostate Cancer Initiation and Therapy. *Dose-response : a publication of International Hormesis Society*. 2019;17(2):1559325819843374.

Lupien SJ, Buss C, Schramek TE, Maheu F, Pruessner J. Hormetic influence of glucocorticoids on human memory. *Nonlinearity in biology, toxicology, medicine*. 2005;3(1):23-56.

Luptak I, Croteau D, Valentine C, Qin F, Siwik D, Remick D, et al. Myocardial Redox Hormesis Protects the Heart of Female Mice in Sepsis. *Shock* (Augusta, Ga). 2018.

Lushchak OV, Karaman HS, Kozeretska IA, Koliada AK, Zabuga OG, Pisaruk AV, et al. Larval crowding results in hormesis-like effects on longevity in *Drosophila*: timing of eclosion as a model. *Biogerontology*. 2019;20(2):191-201.

Lushchak VI. Dissection of the hormetic curve: analysis of components and mechanisms. *Dose-response : a publication of International Hormesis Society*. 2014;12(3):466-79.

Lutz W, Baranski B, Krajewska B. Hormesis and stress responses of human cells to chemical and physical hazards present at work places. *Medycyna pracy*. 1993;44(6):529-37.

Macklis RM, Beresford B. Radiation hormesis. *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*. 1991;32(2):350-9.

Maglioni S, Schiavi A, Runci A, Shaik A, Ventura N. Mitochondrial stress extends lifespan in *C. elegans* through neuronal hormesis. *Experimental gerontology*. 2014;56:89-98.

Maher J, Yamamoto M. The rise of antioxidant signaling--the evolution and hormetic actions of Nrf2. *Toxicology and applied pharmacology*. 2010;244(1):4-15.

Mahmoud SS, Torchilin VP. Hormetic/cytotoxic effects of *Nigella sativa* seed alcoholic and aqueous extracts on MCF-7 breast cancer cells alone or in combination with doxorubicin. *Cell biochemistry and biophysics*. 2013;66(3):451-60.

Mallqui KSV, Vieira JL, Guedes RNC, Gontijo LM. Azadirachtin-induced hormesis mediating shift in fecundity-longevity trade-off in the Mexican bean weevil (*Chrysomelidae: Bruchinae*). *Journal of economic entomology*. 2014;107(2):860-6.

Mane NR, Gajare KA, Deshmukh AA. Mild heat stress induces hormetic effects in protecting the primary culture of mouse prefrontal cerebrocortical neurons from neuropathological alterations. *IBRO reports*. 2018;5:110-5.

Manoli I, Sysol JR, Epping MW, Li L, Wang C, Sloan JL, et al. FGF21 underlies a hormetic response to metabolic stress in methylmalonic acidemia. *JCI insight*. 2018;3(23).

Mantha M, Jumarie C. Cadmium-induced hormetic effect in differentiated Caco-2 cells: ERK and p38 activation without cell proliferation stimulation. *Journal of cellular physiology*. 2010;224(1):250-61.

Mao L, Franke J. Hormesis in aging and neurodegeneration-a prodigy awaiting dissection. *International journal of molecular sciences*. 2013;14(7):13109-28.

Marchant GE. A regulatory precedent for hormesis. *Human & experimental toxicology*. 2001;20(3):143-4.

Marchant GE. Hormesis and toxic torts. *Human & experimental toxicology*. 2008;27(2):97-107.

Marchant GE. Legal criteria and judicial precedents relevant to incorporation of hormesis into regulatory decision-making. *The Science of the total environment*. 2002;288(1-2):141-53.

Marcus CS. Time to Reject the Linear-No Threshold Hypothesis and Accept Thresholds and Hormesis: A Petition to the U.S. Nuclear Regulatory Commission. *Clinical nuclear medicine*. 2015;40(7):617-9.

Marini AM, Jiang H, Pan H, Wu X, Lipsky RH. Hormesis: a promising strategy to sustain endogenous neuronal survival pathways against neurodegenerative disorders. *Ageing research reviews*. 2008;7(1):21-33.

Marques FZ, Markus MA, Morris BJ. Hormesis as a pro-healthy aging intervention in human beings? Dose-response : a publication of International Hormesis Society. 2009;8(1):28-33.

Marques FZ, Morris BJ. Commentary on resveratrol and hormesis: resveratrol--a hormetic marvel in waiting? *Human & experimental toxicology*. 2010;29(12):1026-8.

Martel J, Ojcius DM, Ko Y-F, Ke P-Y, Wu C-Y, Peng H-H, et al. Hormetic Effects of Phytochemicals on Health and Longevity. *Trends in endocrinology and metabolism: TEM*. 2019.

Marthandan S, Priebe S, Groth M, Guthke R, Platzer M, Hemmerich P, et al. Hormetic effect of rotenone in primary human fibroblasts. *Immunity & ageing : I & A*. 2015;12:11.

Martin-Castillo B, Vazquez-Martin A, Oliveras-Ferraros C, Menendez JA. Metformin and cancer: doses, mechanisms and the dandelion and hormetic phenomena. *Cell cycle (Georgetown, Tex)*. 2010;9(6):1057-64.

Martinez-Sanchez G, Perez-Davison G, Re L, Giuliani A. RETRACTED: Ozone as u-shaped dose responses molecules (hormetins). Dose-response : a publication of International Hormesis Society. 2010;9(1):32-49.

Martins I, Galluzzi L, Kroemer G. Hormesis, cell death and aging. *Aging*. 2011;3(9):821-8.

Martucci M, Ostan R, Biondi F, Bellavista E, Fabbri C, Bertarelli C, et al. Mediterranean diet and inflammaging within the hormesis paradigm. *Nutrition reviews*. 2017;75(6):442-55.

Masoro EJ. Hormesis and the antiaging action of dietary restriction. *Experimental gerontology*. 1998;33(1-2):61-6.

Masoro EJ. Hormesis is the beneficial action resulting from the response of an organism to a low-intensity stressor. *Human & experimental toxicology*. 2000;19(6):340-1.

Masoro EJ. Role of hormesis in life extension by caloric restriction. Dose-response : a publication of International Hormesis Society. 2006;5(2):163-73.

Masoro EJ. The role of hormesis in life extension by dietary restriction. Interdisciplinary topics in gerontology. 2007;35:1-17.

Mastrangelo D. Hormesis, epitaxy, the structure of liquid water, and the science of homeopathy. Medical science monitor : international medical journal of experimental and clinical research. 2007;13(1):SR1-8.

Mathieu A, Fleurier S, Frenoy A, Dairou J, Bredeche M-F, Sanchez-Vizuet P, et al. Discovery and Function of a General Core Hormetic Stress Response in E.coli Induced by Sublethal Concentrations of Antibiotics. Cell reports. 2016;17(1):46-57.

Mattson MP. Awareness of hormesis will enhance future research in basic and applied neuroscience. Critical reviews in toxicology. 2008;38(7):633-9.

Mattson MP. Dietary factors, hormesis and health. Ageing research reviews. 2008;7(1):43-8.

Mattson MP. Hormesis and disease resistance: activation of cellular stress response pathways. Human & experimental toxicology. 2008;27(2):155-62.

Mattson MP. Hormesis defined. Ageing research reviews. 2008;7(1):1-7.

Matus S, Castillo K, Hetz C. Hormesis: protecting neurons against cellular stress in Parkinson disease. Autophagy. 2012;8(6):997-1001.

Mauerhofer C, Philippova M, Oskolkova OV, Bochkov VN. Hormetic and anti-inflammatory properties of oxidized phospholipids. Molecular aspects of medicine. 2016;49:78-90.

Maulucci G, Daniel B, Cohen O, Avrahami Y, Sasson S. Hormetic and regulatory effects of lipid peroxidation mediators in pancreatic beta cells. Molecular aspects of medicine. 2016;49:49-77.

Maynard KI. Hormesis pervasiveness and its potential implications for pharmaceutical research and development. Dose-response : a publication of International Hormesis Society. 2011;9(3):377-86.

McClure CD, Zhong W, Hunt VL, Chapman FM, Hill FV, Priest NK. Hormesis results in trade-offs with immunity. Evolution; international journal of organic evolution. 2014;68(8):2225-33.

Menzie CA. Hormesis in ecological risk assessment: a useful concept, a confusing term, and/or a distraction? Human & experimental toxicology. 2001;20(10):521-3; discussion 9-31.

Michalski AI, Yashin AI. Detection of hormesis effect in longevity: simulation approach for heterogeneous population. *Mathematical biosciences*. 2002;175(1):57-66.

Micheau JC, Coudret C. Enhanced photo-responsiveness in a photoswitchable system model: emergent hormetic catalysis. *Physical chemistry chemical physics : PCCP*. 2017;19(20):12890-7.

Migliore L, Godeas F, De Filippis SP, Mantovi P, Barchi D, Testa C, et al. Hormetic effect(s) of tetracyclines as environmental contaminant on *Zea mays*. *Environmental pollution (Barking, Essex : 1987)*. 2010;158(1):129-34.

Migliore L, Rotini A, Cerioli NL, Cozzolino S, Fiori M. Phytotoxic antibiotic sulfadimethoxine elicits a complex hormetic response in the weed *lythrum salicaria* L. Dose-response : a publication of International Hormesis Society. 2010;8(4):414-27.

Migliore L, Rotini A, Thaller MC. Low Doses of Tetracycline Trigger the *E. coli* Growth: A Case of Hormetic Response. Dose-response : a publication of International Hormesis Society. 2013;11:550-7.

Mikula-Pietrasik J, Sosinska P, Murias M, Michalak M, Wierchowski M, Piechota M, et al. Resveratrol Derivative, 3,3',4,4'-Tetrahydroxy-trans-Stilbene, Retards Senescence of Mesothelial Cells via Hormetic-Like Prooxidative Mechanism. *The journals of gerontology Series A, Biological sciences and medical sciences*. 2015;70(10):1169-80.

Miller MW, Miller WM. Radiation hormesis in plants. *Health physics*. 1987;52(5):607-16.

Minois N. Applying hormesis in aging research and therapy: a commentary. *Human & experimental toxicology*. 2001;20(6):309-10; discussion 19-20.

Minois N. The hormetic effects of hypergravity on longevity and aging. Dose-response : a publication of International Hormesis Society. 2006;4(2):145-54.

Moffett JR. Miasmas, germs, homeopathy and hormesis: commentary on the relationship between homeopathy and hormesis. *Human & experimental toxicology*. 2010;29(7):539-43.

Moghaddam NSA, Oskouie MN, Butler AE, Petit PX, Barreto GE, Sahebkar A. Hormetic effects of curcumin: What is the evidence? *Journal of cellular physiology*. 2019;234(7):10060-71.

Moghissi AA, Ray DL. Radiation hormesis and radiation cancer risk. *Health physics*. 1988;54(4):473.

Mollereau B. Establishing links between endoplasmic reticulum-mediated hormesis and cancer. *Molecular and cellular biology*. 2013;33(12):2372-4.

Moore MN, Shaw JP, Ferrar Adams DR, Viarengo A. Anti-oxidative cellular protection effect of fasting-induced autophagy as a mechanism for hormesis. *Marine environmental research*. 2015;107:35-44.

Morales-Fernandez L, Fernandez-Crehuet M, Espigares M, Moreno E, Espigares E. Study of the hormetic effect of disinfectants chlorhexidine, povidone iodine and benzalkonium chloride. *European journal of clinical microbiology & infectious diseases : official publication of the European Society of Clinical Microbiology*. 2014;33(1):103-9.

Morley JE, Farr SA. Hormesis and amyloid-beta protein: physiology or pathology? *Journal of Alzheimer's disease : JAD*. 2012;29(3):487-92.

Morre DJ. Chemical hormesis in cell growth: a molecular target at the cell surface. *Journal of applied toxicology : JAT*. 2000;20(2):157-63.

Morris J. Precaution, institutions, incentives, heuristics, regulation and hormesis: comments on 'Hormesis in precautionary regulatory culture: models preferences and the advancement of science'. *Human & experimental toxicology*. 2007;26(11):851-3; discussion 75-6.

Morse JG. Agricultural implications of pesticide-induced hormesis of insects and mites. *Human & experimental toxicology*. 1998;17(5):266-9.

Moskalev AA, Plyusnina EN, Shaposhnikov MV. Radiation hormesis and radioadaptive response in *Drosophila melanogaster* flies with different genetic backgrounds: the role of cellular stress-resistance mechanisms. *Biogerontology*. 2011;12(3):253-63.

Mossman KL. Deconstructing radiation hormesis. *Health physics*. 2001;80(3):263-9.

Murado MA, Vazquez JA. Biphasic toxicodynamic features of some antimicrobial agents on microbial growth: a dynamic mathematical model and its implications on hormesis. *BMC microbiology*. 2010;10:220.

Murado MA, Vazquez JA. The notion of hormesis and the dose-response theory: a unified approach. *Journal of theoretical biology*. 2007;244(3):489-99.

Mushak P, Elliott KC. Structured Development and Promotion of a Research Field: Hormesis in Biology, Toxicology, and Environmental Regulatory Science. *Kennedy Institute of Ethics journal*. 2015;25(4):335-67.

Mushak P. Ad hoc and fast forward: the science of hormesis growth and development. *Environmental health perspectives*. 2009;117(9):1333-8.

Mushak P. Hormesis and its place in nonmonotonic dose-response relationships: some scientific reality checks. *Environmental health perspectives*. 2007;115(4):500-6.

Mushak P. Hormesis: a brief reply to an advocate. *Environmental health perspectives*. 2010;118(4):A153; author reply A-4.

Mushak P. How prevalent is chemical hormesis in the natural and experimental worlds? *The Science of the total environment*. 2013;443:573-81.

Mushak P. Limits to chemical hormesis as a dose-response model in health risk assessment. *The Science of the total environment*. 2013;443:643-9.

Mushak P. Temporal stability of chemical hormesis (CH): Is CH just a temporary stop on the road to thresholds and toxic responses? *The Science of the total environment*. 2016;569-570:1446-56.

Mytych J, Wnuk M, Rattan SIS. Low doses of nanodiamonds and silica nanoparticles have beneficial hormetic effects in normal human skin fibroblasts in culture. *Chemosphere*. 2016;148:307-15.

Nancharaiah YV, Francis AJ. Hormetic effect of ionic liquid 1-ethyl-3-methylimidazolium acetate on bacteria. *Chemosphere*. 2015;128:178-83.

Nascarella MA, Calabrese EJ. A method to evaluate hormesis in nanoparticle dose-responses. *Dose-response : a publication of International Hormesis Society*. 2012;10(3):344-54.

Nascarella MA, Calabrese EJ. The relationship between the IC(50), toxic threshold, and the magnitude of stimulatory response in biphasic (hormetic) dose-responses. *Regulatory toxicology and pharmacology : RTP*. 2009;54(3):229-33.

Nascarella MA, Stanek EJ, 3rd, Hoffmann GR, Calabrese EJ. Quantification of hormesis in anticancer-agent dose-responses. *Dose-response : a publication of International Hormesis Society*. 2009;7(2):160-71.

Nascarella MA, Stoffolano JG, Jr., Stanek EJ, 3rd, Kostecki PT, Calabrese EJ. Hormesis and stage specific toxicity induced by cadmium in an insect model, the queen blowfly, *Phormia regina* Meig. *Environmental pollution (Barking, Essex : 1987)*. 2003;124(2):257-62.

Neafsey PJ, Boxenbaum H, Ciraulo DA, Fournier DJ. A Gompertz age-specific mortality rate model of aging, hormesis, and toxicity: dose-response studies. *Drug metabolism reviews*. 1989;20(1):111-50.

Neafsey PJ, Boxenbaum H, Ciraulo DA, Fournier DJ. A Gompertz age-specific mortality rate model of aging, hormesis, and toxicity: fixed-dose studies. *Drug metabolism reviews*. 1988;19(3-4):369-401.

Neafsey PJ. Age-specific mortality rate analyses suggest response from caloric restriction and hormesis are due to separate mechanisms. *Human & experimental toxicology*. 2000;19(6):342-4.

Neafsey PJ. Longevity hormesis. A review. *Mechanisms of ageing and development*. 1990;51(1):1-31.

Ng CYP, Cheng SH, Yu KN. Effect of Photon Hormesis on Dose Responses to Alpha Particles in Zebrafish Embryos. *International journal of molecular sciences*. 2017;18(2).

Ng CYP, Cheng SH, Yu KN. Hormetic effect induced by depleted uranium in zebrafish embryos. *Aquatic toxicology (Amsterdam, Netherlands)*. 2016;175:184-91.

Nielsen ER, Eskildsen-Helmond YEG, Rattan SIS. MAP kinases and heat shock-induced hormesis in human fibroblasts during serial passaging in vitro. *Annals of the New York Academy of Sciences*. 2006;1067:343-8.

Nokin M-J, Durieux F, Bellier J, Peulen O, Uchida K, Spiegel DA, et al. Hormetic potential of methylglyoxal, a side-product of glycolysis, in switching tumours from growth to death. *Scientific reports*. 2017;7(1):11722.

Nunn AV, Guy GW, Brodie JS, Bell JD. Inflammatory modulation of exercise salience: using hormesis to return to a healthy lifestyle. *Nutrition & metabolism*. 2010;7:87.

Oberbaum M, Frass M, Gropp C. Unequal brothers : are homeopathy and hormesis linked? *Homeopathy : the journal of the Faculty of Homeopathy*. 2015;104(2):97-100.

Oberbaum M, Gropp C. Update on hormesis and its relation to homeopathy. *Homeopathy : the journal of the Faculty of Homeopathy*. 2015;104(4):227-33.

Oberbaum M, Samuels N, Singer SR. Hormesis is not homeopathy. *Toxicology and applied pharmacology*. 2005;206(3):365; author reply -6.

Oberbaum M, Singer SR, Samuels N. Hormesis and homeopathy: bridge over troubled waters. *Human & experimental toxicology*. 2010;29(7):567-71.

Okamoto K. Critical values of linear energy transfer, dose rates and doses for radiation hormesis. *Health physics*. 1987;52(5):671-4.

Okamoto M, Yamamura Y, Liu Y-F, Min-Chul L, Matsui T, Shima T, et al. Hormetic effects by exercise on hippocampal neurogenesis with glucocorticoid signaling. *Brain plasticity (Amsterdam, Netherlands)*. 2015;1(1):149-58.

Oliveira MF, Geihs MA, Franca TFA, Moreira DC, Hermes-Lima M. Is "Preparation for Oxidative Stress" a Case of Physiological Conditioning Hormesis? *Frontiers in physiology*. 2018;9:945.

Olivieri G. Adaptive response and its relationship to hormesis and low dose cancer risk estimation. *Human & experimental toxicology*. 1999;18(7):440-2.

Olsen A, Vantipalli MC, Lithgow GJ. Lifespan extension of *Caenorhabditis elegans* following repeated mild hormetic heat treatments. *Biogerontology*. 2006;7(4):221-30.

Olson HM, Kadyszewski E, Beierschmitt W. Hormesis - a pharmaceutical industry perspective. *Critical reviews in toxicology*. 2001;31(4-5):659-61.

Orden AO. Hypothesis: An alternative pathway for the regulation of inflammation. *Hormesis and inflammation. Medicina*. 2005;65(1):87-8.

Pagano G, Castello G, Gallo M, Borriello I, Guida M. Complex mixture-associated hormesis and toxicity: the case of leather tanning industry. *Dose-response : a publication of International Hormesis Society*. 2008;6(4):383-96.

Pal S, Konkimalla VB. Hormetic Potential of Sulforaphane (SFN) in Switching Cells' Fate Towards Survival or Death. *Mini reviews in medicinal chemistry*. 2016;16(12):980-95.

Panikarovskii VV, Grigor'ian AS, Makar'eva ED, Mogilevskii GM. Ultrastructure of the epithelium of the normal mouth mucosa in dogs. *Stomatologiya*. 1974;53(3):10-3.

Papanastasiou SA, Bali E-MD, Ioannou CS, Papachristos DP, Zarpas KD, Papadopoulos NT. Toxic and hormetic-like effects of three components of citrus essential oils on adult Mediterranean fruit flies (*Ceratitis capitata*). *PloS one*. 2017;12(5):e0177837.

Paperiello CJ. Risk assessment and risk management implications of hormesis. *Human & experimental toxicology*. 1998;17(8):460-2.

Paperiello CJ. Risk assessment and risk management implications of hormesis. *Journal of applied toxicology : JAT*. 2000;20(2):147-8.

Parashar A, Gideon DA, Manoj KM. Murburn Concept: A Molecular Explanation for Hormetic and Idiosyncratic Dose Responses. *Dose-response : a publication of International Hormesis Society*. 2018;16(2):1559325818774421.

Pardon M-C. Hormesis is applicable as a pro-healthy aging intervention in mammals and human beings. *Dose-response : a publication of International Hormesis Society*. 2009;8(1):22-7.

Parsons PA. Caloric restriction, metabolic efficiency and hormesis. *Human & experimental toxicology*. 2000;19(6):345-7.

Parsons PA. Hormesis: an adaptive expectation with emphasis on ionizing radiation. *Journal of applied toxicology : JAT*. 2000;20(2):103-12.

Parsons PA. Metabolic efficiency in response to environmental agents predicts hormesis and invalidates the linear no-threshold premise: ionizing radiation as a case study. *Critical reviews in toxicology*. 2003;33(3-4):443-9.

Parsons PA. Radiation hormesis: an ecological and energetic perspective. *Medical hypotheses*. 2001;57(3):277-9.

Parsons PA. Radiation hormesis: an evolutionary expectation and the evidence. *International journal of radiation applications and instrumentation Part A, Applied radiation and isotopes*. 1990;41(9):857-60.

Parsons PA. Radiation hormesis: challenging LNT theory via ecological and evolutionary considerations. *Health physics*. 2002;82(4):513-6.

Parsons PA. The ecological stress theory of aging and hormesis: an energetic evolutionary model. *Biogerontology*. 2007;8(3):233-42.

Parsons PA. The hormetic zone: an ecological and evolutionary perspective based upon habitat characteristics and fitness selection. *The Quarterly review of biology*. 2001;76(4):459-67.

Peake JM, Markworth JF, Nosaka K, Raastad T, Wadley GD, Coffey VG. Modulating exercise-induced hormesis: Does less equal more? *Journal of applied physiology (Bethesda, Md : 1985)*. 2015;119(3):172-89.

Pearce OM, Laubli H, Bui J, Varki A. Hormesis in cancer immunology: Does the quantity of an immune reactant matter? *Oncoimmunology*. 2014;3:e29312.

Pearce OMT, Laubli H, Verhagen A, Secrest P, Zhang J, Varki NM, et al. Inverse hormesis of cancer growth mediated by narrow ranges of tumor-directed antibodies. *Proceedings of the National Academy of Sciences of the United States of America*. 2014;111(16):5998-6003.

Pech RJ. 2006 Conference of the International Hormesis Society. Stress response mechanisms: from single cells to multinational organizations. Dose-response : a publication of International Hormesis Society. 2006;4(3):201-16.

Pennisi M, Crupi R, Di Paola R, Ontario ML, Bella R, Calabrese EJ, et al. Inflammasomes, hormesis, and antioxidants in neuroinflammation: Role of NRLP3 in Alzheimer disease. *Journal of neuroscience research*. 2017;95(7):1360-72.

Petin VG, Morozov II, Kabakova NM, Gorshkova TA. Some effects of radiation hormesis for bacterial and yeast cells. *Radiatsionnaia biologii, radioecologii*. 2003;43(2):176-8.

Pickrell JA, Oehme FW. Examining the risks and benefits of considering both the traditional dose--response and hormesis in arriving at an acceptable exposure level. *Human & experimental toxicology*. 2006;25(1):23-7.

Pickrell JA, Oehme FW. Examining the risks and benefits of replacing traditional dose-response with hormesis. *Human & experimental toxicology*. 2005;24(5):259-64.

Pickrell JA, Oehme FW. Invited response to definition of hormesis (EJ Calabrese and LA Baldwin). *Human & experimental toxicology*. 2002;21(2):107-9; discussion 13-4.

Pietsch K, Saul N, Chakrabarti S, Sturzenbaum SR, Menzel R, Steinberg CEW. Hormetins, antioxidants and prooxidants: defining quercetin-, caffeic acid- and rosmarinic acid-mediated life extension in *C. elegans*. *Biogerontology*. 2011;12(4):329-47.

Piispanen R. Radiation hormesis - fact or fiction? *Environmental geochemistry and health*. 1995;17(2):95-102.

Plauth A, Geikowski A, Cichon S, Wowro SJ, Liedgens L, Rousseau M, et al. Hormetic shifting of redox environment by pro-oxidative resveratrol protects cells against stress. *Free radical biology & medicine*. 2016;99:608-22.

Plumb TN, Cullen PK, Minor TR. Parameters of hormetic stress and resilience to trauma in rats. *Stress (Amsterdam, Netherlands)*. 2015;18(1):88-95.

Pollycove M, Feinendegen LE. Biologic responses to low doses of ionizing radiation: Detriment versus hormesis. Part 2. Dose responses of organisms. *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*. 2001;42(9):26N-32N, 7N.

Pollycove M. The issue of the decade: hormesis. *European journal of nuclear medicine*. 1995;22(5):399-401.

Polster M. Problem of hormesis induced by synthetic antituberculosis agents. *Giornale italiano di chemioterapia*. 1956;3(1-2):33-6.

Poschenrieder C, Cabot C, Martos S, Gallego B, Barcelo J. Do toxic ions induce hormesis in plants? *Plant science : an international journal of experimental plant biology*. 2013;212:15-25.

Poumadere M. Hormesis: public health policy, organizational safety and risk communication. *Human & experimental toxicology*. 2003;22(1):39-41; discussion 3-9.

Pradhan S, Miller L, Marcillo V, Koch AR, Graf Grachet N, Molineros JE, et al. Hormetic Effects of Thiophanate-Methyl in Multiple Isolates of *Sclerotinia homoeocarpa*. *Plant disease*. 2019;103(1):89-94.

Prehn RT, Berd D. Whipsaw cancer treatments: the role of hormesis in endocrine and immune therapies. *Seminars in oncology*. 2006;33(6):708-10.

Preibisch-Effenberger R, Knothe J. On the problem of strychnine effect on the central auditory pathway. *Zeitschrift fur Laryngologie, Rhinologie, Otologie und ihre Grenzgebiete*. 1969;48(8):613-8.

Prekeges JL. Radiation hormesis, or, could all that radiation be good for us? *Journal of nuclear medicine technology*. 2003;31(1):11-7.

Prichard HM. Air ionization and radiation hormesis. *Health physics*. 1984;46(5):1139-40.

Prickett CD, Lister E, Collins M, Trevithick-Sutton CC, Hirst M, Vinson JA, et al. Alcohol: Friend or Foe? Alcoholic Beverage Hormesis for Cataract and Atherosclerosis is Related to Plasma Antioxidant Activity. *Nonlinearity in biology, toxicology, medicine*. 2004;2(4):353-70.

Prokes J, Haas T, Sromova S, Jojkova K, Vulterin K. Hormesis in effect of low uranium doses on organisms. *Sbornik lekarsky*. 1994;95(4):347-55.

Przybysz AJ, Choe KP, Roberts LJ, Strange K. Increased age reduces DAF-16 and SKN-1 signaling and the hormetic response of *Caenorhabditis elegans* to the xenobiotic juglone. *Mechanisms of ageing and development*. 2009;130(6):357-69.

Ptok M, Dunkelmann A. Phonological loop and low level phonological processing in preschool children. *Hno*. 2012;60(3):269-74.

Ptok M, Lichte C, Buller N, Wink T, Naumann CL. Phonological loop and minimal pair discrimination in preschool children. *Hno*. 2004;52(12):1109-12.

Puatanachokchai R, Morimura K, Wanibuchi H, Oka M, Kinoshita A, Mitsuru F, et al. Alpha-benzene hexachloride exerts hormesis in preneoplastic lesion formation of rat hepatocarcinogenesis with the possible role for hepatic detoxifying enzymes. *Cancer letters*. 2006;240(1):102-13.

Puzzo D, Privitera L, Palmeri A. Hormetic effect of amyloid-beta peptide in synaptic plasticity and memory. *Neurobiology of aging*. 2012;33(7):1484.e15-24.

Qi H, Han Y, Rong J. Potential roles of PI3K/Akt and Nrf2-Keap1 pathways in regulating hormesis of Z-ligustilide in PC12 cells against oxygen and glucose deprivation. *Neuropharmacology*. 2012;62(4):1659-70.

Qin L-T, Liu S-S, Liu H-L, Zhang Y-H. Support vector regression and least squares support vector regression for hormetic dose-response curves fitting. *Chemosphere*. 2010;78(3):327-34.

Qu R, Liu S-S, Li T, Liu H-L. Using an interpolation-based method (IDVeq) to predict the combined toxicities of hormetic ionic liquids. *Chemosphere*. 2019;217:669-79.

Qu R, Liu S-S, Zheng Q-F, Li T. Using Delaunay triangulation and Voronoi tessellation to predict the toxicities of binary mixtures containing hormetic compound. *Scientific reports*. 2017;7:43473.

Qu Y, Xiao D, Li J, Chen Z, Biondi A, Desneux N, et al. Sublethal and hormesis effects of imidacloprid on the soybean aphid *Aphis glycines*. *Ecotoxicology (London, England)*. 2015;24(3):479-87.

Qu Y, Xiao D, Liu J, Chen Z, Song L, Desneux N, et al. Sublethal and hormesis effects of beta-cypermethrin on the biology, life table parameters and reproductive potential of soybean aphid *Aphis glycines*. *Ecotoxicology (London, England)*. 2017;26(7):1002-9.

Radak Z, Chung HY, Goto S. Exercise and hormesis: oxidative stress-related adaptation for successful aging. *Biogerontology*. 2005;6(1):71-5.

Radak Z, Chung HY, Koltai E, Taylor AW, Goto S. Exercise, oxidative stress and hormesis. *Ageing research reviews*. 2008;7(1):34-42.

Radak Z, Ishihara K, Tekus E, Varga C, Posa A, Balogh L, et al. Exercise, oxidants, and antioxidants change the shape of the bell-shaped hormesis curve. *Redox biology*. 2017;12:285-90.

Radiation hormesis. The Conference on Radiation Hormesis. Oakland, CA, 14-16 August 1985. *Proceedings. Health physics*. 1987;52(5):519-678.

Rainey N, Motte L, Aggarwal BB, Petit PX. Curcumin hormesis mediates a cross-talk between autophagy and cell death. *Cell death & disease*. 2015;6:e2003.

Ramanaidu K, Cutler GC. Different toxic and hormetic responses of *Bombus impatiens* to *Beauveria bassiana*, *Bacillus subtilis* and spirotetramat. *Pest management science*. 2013;69(8):949-54.

Rand GM. Commentary: hormesis and ecological risk assessment. *Human & experimental toxicology*. 2001;20(10):525-6; discussion 9-31.

Randall WA, Price CW, Welch H. Demonstration of hormesis (increase in fatality rate) by penicillin. *American journal of public health and the nation's health*. 1947;37(4):421-5.

Randall WA, Price CW, Welch H. Demonstration of Hormesis (Increase in Fatality Rate) by Penicillin. *American journal of public health and the nation's health*. 1947;37(4):421-5.

Randic M, Estrada E. Order from chaos: observing hormesis at the proteome level. *Journal of proteome research*. 2005;4(6):2133-6.

Rashkov P, Barrett IP, Beardmore RE, Bendtsen C, Gudelj I. Kinase Inhibition Leads to Hormesis in a Dual Phosphorylation-Dephosphorylation Cycle. *PLoS computational biology*. 2016;12(11):e1005216.

Rattan SI. Ageing, gerontogenes, and hormesis. *Indian journal of experimental biology*. 2000;38(1):1-5.

Rattan SI. Applying hormesis in aging research and therapy. *Human & experimental toxicology*. 2001;20(6):281-5; discussion 93-4.

Rattan SI. Hormesis in biogerontology. *Critical reviews in toxicology*. 2001;31(4-5):663-4.

Rattan SI. Principles and practice of hormetic treatment of aging and age-related diseases. *Human & experimental toxicology*. 2008;27(2):151-4.

Rattan SIS, Ali RE. Hormetic prevention of molecular damage during cellular aging of human skin fibroblasts and keratinocytes. *Annals of the New York Academy of Sciences*. 2007;1100:424-30.

Rattan SIS, Demirovic D. Hormesis can and does work in humans. Dose-response : a publication of International Hormesis Society. 2009;8(1):58-63.

Rattan SIS, Deva T. Testing the hormetic nature of homeopathic interventions through stress response pathways. *Human & experimental toxicology*. 2010;29(7):551-4.

Rattan SIS, Eskildsen-Helmond YEG, Beedholm R. Molecular mechanisms of anti-aging hormetic effects of mild heat stress on human cells. Nonlinearity in biology, toxicology, medicine. 2004;2(2):105-16.

Rattan SIS, Fernandes RA, Demirovic D, Dymek B, Lima CF. Heat stress and hormetin-induced hormesis in human cells: effects on aging, wound healing, angiogenesis, and differentiation. Dose-response : a publication of International Hormesis Society. 2009;7(1):90-103.

Rattan SIS, Gonzalez-Dosal R, Nielsen ER, Kraft DC, Weibel J, Kahns S. Slowing down aging from within: mechanistic aspects of anti-aging hormetic effects of mild heat stress on human cells. Acta biochimica Polonica. 2004;51(2):481-92.

Rattan SIS, Kryzch V, Schnebert S, Perrier E, Nizard C. Hormesis-based anti-aging products: a case study of a novel cosmetic. Dose-response : a publication of International Hormesis Society. 2013;11(1):99-108.

Rattan SIS, Sejersen H, Fernandes RA, Luo W. Stress-mediated hormetic modulation of aging, wound healing, and angiogenesis in human cells. Annals of the New York Academy of Sciences. 2007;1119:112-21.

Rattan SIS. Aging intervention, prevention, and therapy through hormesis. The journals of gerontology Series A, Biological sciences and medical sciences. 2004;59(7):705-9.

Rattan SIS. Aging, anti-aging, and hormesis. Mechanisms of ageing and development. 2004;125(4):285-9.

Rattan SIS. Hormesis in aging. Ageing research reviews. 2008;7(1):63-78.

Rattan SIS. Hormetic mechanisms of anti-aging and rejuvenating effects of repeated mild heat stress on human fibroblasts in vitro. Rejuvenation research. 2004;7(1):40-8.

Rattan SIS. Hormetic modulation of aging and longevity by mild heat stress. Dose-response : a publication of International Hormesis Society. 2006;3(4):533-46.

Rattan SIS. Mechanisms of hormesis through mild heat stress on human cells. Annals of the New York Academy of Sciences. 2004;1019:554-8.

Rattan SIS. Molecular gerontology: from homeodynamics to hormesis. Current pharmaceutical design. 2014;20(18):3036-9.

Rattan SIS. Rationale and methods of discovering hormetins as drugs for healthy ageing. Expert opinion on drug discovery. 2012;7(5):439-48.

Rattan SIS. Targeting the age-related occurrence, removal, and accumulation of molecular damage by hormesis. *Annals of the New York Academy of Sciences*. 2010;1197:28-32.

Razumov AN, Gusarov II, Semenov BN, Belenichev AI, Dubovskoi AV. Radiation hormesis, radon therapy and radon prevention of disease. *Voprosy kurortologii, fizioterapii, i lechebnoi fizicheskoi kultury*. 2001(5):47-50.

Redpath JL, Elmore E. Radiation-induced neoplastic transformation in vitro, hormesis and risk assessment. Dose-response : a publication of International Hormesis Society. 2006;5(2):123-30.

Ren W, Chang H, Teng Y. Sulfonated graphene-induced hormesis is mediated through oxidative stress in the roots of maize seedlings. *The Science of the total environment*. 2016;572:926-34.

Renn O. An ethical appraisal of hormesis: toward a rational discourse on the acceptability of risks and benefits. *Human & experimental toxicology*. 2008;27(8):627-42.

Renn O. Hormesis and risk communication. *Human & experimental toxicology*. 2003;22(1):3-24.

Renn O. Implications of the hormesis hypothesis for risk perception and communication. *Human & experimental toxicology*. 1998;17(8):431-8.

Renner R. Hormesis gets massive data support. *Environmental science & technology*. 2006;40(21):6525-6.

Renner R. Hormesis. Nietzsche's toxicology. *Scientific American*. 2003;289(3):28-30.

Rey B, Degletagne C, Bodennec J, Monternier P-A, Mortz M, Roussel D, et al. Hormetic response triggers multifaceted anti-oxidant strategies in immature king penguins (*Aptenodytes patagonicus*). *Free radical biology & medicine*. 2016;97:577-87.

Ricci PF, MacDonald TR. Hormesis and precaution: the twain shall meet. *Human & experimental toxicology*. 2007;26(11):877-89.

Ristow M, Zarse K. How increased oxidative stress promotes longevity and metabolic health: The concept of mitochondrial hormesis (mitohormesis). *Experimental gerontology*. 2010;45(6):410-8.

Rithidech KN, Scott BR. Evidence for radiation hormesis after in vitro exposure of human lymphocytes to low doses of ionizing radiation. Dose-response : a publication of International Hormesis Society. 2008;6(3):252-71.

Rix RR, Cutler GC. Does multigenerational exposure to hormetic concentrations of imidacloprid precondition aphids for increased insecticide tolerance? *Pest management science*. 2018;74(2):314-22.

Roberts SM. Another view of the scientific foundations of hormesis. *Critical reviews in toxicology*. 2001;31(4-5):631-5.

Rodricks JV. Hormesis and toxicological risk assessment. *Toxicological sciences : an official journal of the Society of Toxicology*. 2003;71(2):134-6.

Rodriguez M, Snoek LB, Riksen JAG, Bevers RP, Kammenga JE. Genetic variation for stress-response hormesis in *C. elegans* lifespan. *Experimental gerontology*. 2012;47(8):581-7.

Rodriguez-Salus M, Bektas Y, Schroeder M, Knoth C, Vu T, Roberts P, et al. The Synthetic Elicitor 2-(5-Bromo-2-Hydroxy-Phenyl)-Thiazolidine-4-Carboxylic Acid Links Plant Immunity to Hormesis. *Plant physiology*. 2016;170(1):444-58.

Romano PE. More caveats for the scientific method: Randomized controls are unnecessary; Hormesis? But don't communicate your expectations; Robot computers! *Binocular vision & strabismus quarterly*. 2004;19(1):9-10.

Rossi HH. Comment on "Proposition: radiation hormesis should be elevated to a position of scientific respectability" *Med. Phys.* 25, 1407-1410 (1998). *Medical physics*. 1998;25(12):2476.

Roullier-Gall C, Witting M, Moritz F, Gil RB, Goffette D, Valade M, et al. Natural oxygenation of Champagne wine during ageing on lees: A metabolomics picture of hormesis. *Food chemistry*. 2016;203:207-15.

Rozman KK, Doull J. Scientific foundations of hormesis. Part 2. Maturation, strengths, limitations, and possible applications in toxicology, pharmacology, and epidemiology. *Critical reviews in toxicology*. 2003;33(3-4):451-62.

Rozman KK. Hormesis and risk assessment. *Human & experimental toxicology*. 2005;24(5):255-7.

Ruda VP, Kuzin AM. The occurrence of hormesis during gamma-irradiation of developing rat pups. *Radiobiologia*. 1991;31(3):345-7.

Ruzdic M. Hormetic effects of exposure to low doses of ionizing radiation. *Medicinski arhiv*. 1989;43(2-3):117-23.

Saal FSV. Hormesis controversy. *Environmental science & technology*. 2007;41(1):3.

Sacks B, Meyerson G. Linear No-threshold (LNT) vs. Hormesis: Paradigms, Assumptions, and Mathematical Conventions that Bias the Conclusions in Favor of LNT and Against hormesis. *Health physics*. 2019;116(6):807-16.

Sagan LA. On radiation, paradigms, and hormesis. *Science* (New York, NY). 1989;245(4918):574, 621.

Sagan LA. What is hormesis and why haven't we heard about it before? *Health physics*. 1987;52(5):521-5.

Saitanis CJ, Agathokleous E. Stress response and population dynamics: Is Allee effect hormesis? *The Science of the total environment*. 2019;682:623-8.

Sajeev S, Melo JS, Hegde S. Gamma radiation-induced in vitro hormetic apogamy in the fern *Pityrogramma calomelanos* (L.) link. *Bio Systems*. 2018;173:221-4.

Sakai K. Biological responses to low dose radiation--hormesis and adaptive responses. *Yakugaku zasshi : Journal of the Pharmaceutical Society of Japan*. 2006;126(10):827-31.

Salminen A, Kaarniranta K. ER stress and hormetic regulation of the aging process. *Ageing research reviews*. 2010;9(3):211-7.

Sanders CL, Scott BR. Smoking and hormesis as confounding factors in radiation pulmonary carcinogenesis. *Dose-response : a publication of International Hormesis Society*. 2006;6(1):53-79.

Sandin P. The ethics of hormesis--no fuss? *Human & experimental toxicology*. 2008;27(8):643-6.

Sano M, Fukuda K. Activation of mitochondrial biogenesis by hormesis. *Circulation research*. 2008;103(11):1191-3.

Sano M. Cardioprotection by hormetic responses to aldehyde. *Circulation journal : official journal of the Japanese Circulation Society*. 2010;74(9):1787-93.

Sarup P, Loeschcke V. Life extension and the position of the hormetic zone depends on sex and genetic background in *Drosophila melanogaster*. *Biogerontology*. 2011;12(2):109-17.

Sasson S. 4-Hydroxyalkenal-activated PPARdelta mediates hormetic interactions in diabetes. *Biochimie*. 2017;136:85-9.

Saul N, Pietsch K, Menzel R, Sturzenbaum SR, Steinberg CEW. The longevity effect of tannic acid in *Caenorhabditis elegans*: Disposable Soma meets hormesis. *The journals of gerontology Series A, Biological sciences and medical sciences*. 2010;65(6):626-35.

Saul N, Pietsch K, Sturzenbaum SR, Menzel R, Steinberg CEW. Hormesis and longevity with tannins: free of charge or cost-intensive? *Chemosphere*. 2013;93(6):1005-8.

Scannapieco AC, Sorensen JG, Loeschcke V, Norry FM. Heat-induced hormesis in longevity of two sibling *Drosophila* species. *Biogerontology*. 2007;8(3):315-25.

Schmeisser S, Schmeisser K, Weimer S, Groth M, Priebe S, Fazius E, et al. Mitochondrial hormesis links low-dose arsenite exposure to lifespan extension. *Aging cell*. 2013;12(3):508-17.

Schmidt CM, Cheng CN, Marino A, Konsoula R, Barile FA. Hormesis effect of trace metals on cultured normal and immortal human mammary cells. *Toxicology and industrial health*. 2004;20(1-5):57-68.

Schmidt-Heck W, Wonne EC, Hiller T, Menzel U, Koczan D, Damm G, et al. Global Transcriptional Response of Human Liver Cells to Ethanol Stress of Different Strength Reveals Hormetic Behavior. *Alcoholism, clinical and experimental research*. 2017;41(5):883-94.

Schollnberger H, Stewart RD, Mitchel REJ, Hofmann W. An examination of radiation hormesis mechanisms using a multistage carcinogenesis model. *Nonlinearity in biology, toxicology, medicine*. 2004;2(4):317-52.

Schreck CB. Stress and fish reproduction: the roles of allostasis and hormesis. *General and comparative endocrinology*. 2010;165(3):549-56.

Schumacher B. Transcription-blocking DNA damage in aging: a mechanism for hormesis. *BioEssays : news and reviews in molecular, cellular and developmental biology*. 2009;31(12):1347-56.

Scientific foundations of hormesis. Introduction. Critical reviews in toxicology. 2001;31(4-5):351-2.

Scott BR. It's time for a new low-dose-radiation risk assessment paradigm--one that acknowledges hormesis. Dose-response : a publication of International Hormesis Society. 2008;6(4):333-51.

Scott BR. Radiation-hormesis phenotypes, the related mechanisms and implications for disease prevention and therapy. *Journal of cell communication and signaling*. 2014;8(4):341-52.

Semchyshyn HM, Valishkevych BV. Hormetic Effect of H₂O₂ in *Saccharomyces cerevisiae*: Involvement of TOR and Glutathione Reductase. Dose-

response : a publication of International Hormesis Society. 2016;14(2):1559325816636130.

Semchyshyn HM. Hormetic concentrations of hydrogen peroxide but not ethanol induce cross-adaptation to different stresses in budding yeast. *International journal of microbiology*. 2014;2014:485792.

Shanker HM. Hormesis and toxic torts. *Human & experimental toxicology*. 2008;27(2):117-8; discussion 9-20.

Shaposhnikov MV, Turyshcheva EV, Moskalev AA. Low-dose rate irradiation induced hormesis, hypersensitivity and adaptive response in *Drosophila melanogaster* of radiosensitive strains. *Radiatsionnaya biologiya, radioecologiya*. 2009;49(1):46-54.

Sharma K. Mitochondrial hormesis and diabetic complications. *Diabetes*. 2015;64(3):663-72.

Sharma PK, Agrawal V, Roy N. Mitochondria-mediated hormetic response in life span extension of calorie-restricted *Saccharomyces cerevisiae*. *Age* (Dordrecht, Netherlands). 2011;33(2):143-54.

Sharma S, Singla N, Chadha VD, Dhawan DK. A concept of radiation hormesis: stimulation of antioxidant machinery in rats by low dose ionizing radiation. *Hellenic journal of nuclear medicine*. 2019;22(1):43-8.

Shen J, Tower J. Aging, MnSOD, and hormesis mechanisms converge on liver mUPR. *Cell cycle* (Georgetown, Tex). 2013;12(20):3237-8.

Shen K, Shen C, Lu Y, Tang X, Zhang C, Chen X, et al. Hormesis response of marine and freshwater luminescent bacteria to metal exposure. *Biological research*. 2009;42(2):183-7.

Shen Z-J, Postnikoff S, Tyler JK. Is Gcn4-induced autophagy the ultimate downstream mechanism by which hormesis extends yeast replicative lifespan? *Current genetics*. 2019;65(3):717-20.

Shephard AM, Aksenov V, Tran J, Nelson CJ, Boreham DR, Rollo CD. Hormetic Effects of Early Juvenile Radiation Exposure on Adult Reproduction and Offspring Performance in the Cricket (*Acheta domesticus*). *Dose-response : a publication of International Hormesis Society*. 2018;16(3):1559325818797499.

Sheppard SC, Regitnig PJ. Factors controlling the hormesis response in irradiated seed. *Health physics*. 1987;52(5):599-605.

Shibamoto Y, Nakamura H. Overview of Biological, Epidemiological, and Clinical Evidence of Radiation Hormesis. *International journal of molecular sciences*. 2018;19(8).

Shushimita S, Grefhorst A, Steenbergen J, de Bruin RWF, Ijzermans JNM, Themmen APN, et al. Protection against renal ischemia-reperfusion injury through hormesis? Dietary intervention versus cold exposure. *Life sciences*. 2016;144:69-79.

Shutoh Y, Takeda M, Ohtsuka R, Haishima A, Yamaguchi S, Fujie H, et al. Low dose effects of dichlorodiphenyltrichloroethane (DDT) on gene transcription and DNA methylation in the hypothalamus of young male rats: implication of hormesis-like effects. *The Journal of toxicological sciences*. 2009;34(5):469-82.

Sial MU, Zhao Z, Zhang L, Zhang Y, Mao L, Jiang H. Evaluation of Insecticides induced hormesis on the demographic parameters of *Myzus persicae* and expression changes of metabolic resistance detoxification genes. *Scientific reports*. 2018;8(1):16601.

Sielken RL, Jr., Stevenson DE. Some implications for quantitative risk assessment if hormesis exists. *Human & experimental toxicology*. 1998;17(5):259-62.

Sies H, Feinendegen LE. Radiation Hormesis: The Link to Nanomolar Hydrogen Peroxide. *Antioxidants & redox signaling*. 2017;27(9):596-8.

Singh F, Charles A-L, Schlagowski A-I, Bouitbir J, Bonifacio A, Piquard F, et al. Reductive stress impairs myoblasts mitochondrial function and triggers mitochondrial hormesis. *Biochimica et biophysica acta*. 2015;1853(7):1574-85.

Siow RCM, Mann GE. Dietary isoflavones and vascular protection: activation of cellular antioxidant defenses by SERMs or hormesis? *Molecular aspects of medicine*. 2010;31(6):468-77.

Slovic P. If hormesis exists...: implications for risk perception and communication. *Human & experimental toxicology*. 1998;17(8):439-40.

Smith H. Radiation hormesis in relation to radiation protection. *Chinese medical journal*. 1994;107(8):615-23.

Smith VK, Evans MF. Economic implications of hormesis: some additional thoughts. *Human & experimental toxicology*. 2004;23(6):285-7; discussion 303-5.

Solis Y, Chavarria G, Garcia F, Rodriguez C. Exposure of a Tropical Soil to MG/KG of Oxytetracycline Elicits Hormetic Responses in the Catabolic Activities

of Its Microbial Community. Dose-response : a publication of International Hormesis Society. 2011;9(3):434-41.

Son TG, Camandola S, Mattson MP. Hormetic dietary phytochemicals. Neuromolecular medicine. 2008;10(4):236-46.

Sonneborn JS. Mimetics of hormetic agents: stress-resistance triggers. Dose-response : a publication of International Hormesis Society. 2010;8(1):97-121.

Sonneborn JS. The myth and reality of reversal of aging by hormesis. Annals of the New York Academy of Sciences. 2005;1057:165-76.

Sorensen JG, Holmstrup M, Sarup P, Loeschcke V. Evolutionary theory and studies of model organisms predict a cautiously positive perspective on the therapeutic use of hormesis for healthy aging in humans. Dose-response : a publication of International Hormesis Society. 2009;8(1):53-7.

Sorensen JG, Kristensen TN, Kristensen KV, Loeschcke V. Sex specific effects of heat induced hormesis in Hsf-deficient *Drosophila melanogaster*. Experimental gerontology. 2007;42(12):1123-9.

Spoljaric D, Cipak A, Horvatic J, Andrisic L, Waeg G, Zarkovic N, et al. Endogenous 4-hydroxy-2-nonenal in microalga *Chlorella kessleri* acts as a bioactive indicator of pollution with common herbicides and growth regulating factor of hormesis. Aquatic toxicology (Amsterdam, Netherlands). 2011;105(3-4):552-8.

Sprott RL. Is caloric restriction hormetic or is ad libitum feeding toxic? Human & experimental toxicology. 2000;19(6):351-2.

Stanley JK, Perkins EJ, Habib T, Sims JG, Chappell P, Escalon BL, et al. The good, the bad, and the toxic: approaching hormesis in *Daphnia magna* exposed to an energetic compound. Environmental science & technology. 2013;47(16):9424-33.

Stark M. Hormesis, adaptation, and the sandpile model. Critical reviews in toxicology. 2008;38(7):641-4.

Stark M. The sandpile model: optimal stress and hormesis. Dose-response : a publication of International Hormesis Society. 2012;10(1):66-74.

Stebbing AR. A theory for growth hormesis. Mutation research. 1998;403(1-2):249-58.

Stebbing AR. Growth hormesis: a by-product of control. Health physics. 1987;52(5):543-7.

Stebbing AR. Hormesis: interpreting the beta-curve using control theory. *Journal of applied toxicology : JAT*. 2000;20(2):93-101.

Stebbing AR. Hormesis--the stimulation of growth by low levels of inhibitors. *The Science of the total environment*. 1982;22(3):213-34.

Stebbing ARD. A mechanism for hormesis--a problem in the wrong discipline. *Critical reviews in toxicology*. 2003;33(3-4):463-7.

Stebbing ARD. Adaptive Responses Account for the beta-Curve-Hormesis is Linked to Acquired Tolerance. *Nonlinearity in biology, toxicology, medicine*. 2003;1(4):493-511.

Stebbing ARD. Interpreting 'dose-response' curves using homeodynamic data: with an improved explanation for hormesis. *Dose-response : a publication of International Hormesis Society*. 2009;7(3):221-33.

Stebbing ARD. Tolerance and hormesis--increased resistance to copper in hydroids linked to hormesis. *Marine environmental research*. 2002;54(3-5):805-9.

Steevens JA, Duke BM, Lotufo GR, Bridges TS. Toxicity of the explosives 2,4,6-trinitrotoluene, hexahydro-1,3,5-trinitro-1,3,5-triazine, and octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine in sediments to *Chironomus tentans* and *Hyalella azteca*: low-dose hormesis and high-dose mortality. *Environmental toxicology and chemistry*. 2002;21(7):1475-82.

Steinberg CEW, Pietsch K, Saul N, Menzel S, Swain SC, Sturzenbaum SR, et al. Transcript expression patterns illuminate the mechanistic background of hormesis in *Caenorhabditis elegans* maupas. *Dose-response : a publication of International Hormesis Society*. 2013;11:558-76.

Stijns MMJPE, Randall MJ, Bast A, Haenen GRMM. Adaptation to acrolein through upregulating the protection by glutathione in human bronchial epithelial cells: the materialization of the hormesis concept. *Biochemical and biophysical research communications*. 2014;446(4):1029-34.

Stijns MMJPE, Thongkam W, Albrecht C, Hellack B, Bast A, Haenen GRMM, et al. Silver nanoparticles induce hormesis in A549 human epithelial cells. *Toxicology in vitro : an international journal published in association with BIBRA*. 2017;40:223-33.

Stijns MMJPE, Weseler AR, Bast A, Haenen GRMM. Time in Redox Adaptation Processes: From Evolution to Hormesis. *International journal of molecular sciences*. 2016;17(10).

Stringer WW, Rossiter HB. Hormesis, mithridatism and Paracelsus: A little oxidative stress goes a long way. *Hypertension research : official journal of the Japanese Society of Hypertension*. 2017;40(1):29-30.

Strom JO, Theodorsson A, Theodorsson E. Hormesis and Female Sex Hormones. *Pharmaceuticals (Basel, Switzerland)*. 2011;4(5):726-40.

Sukata T, Uwagawa S, Ozaki K, Ogawa M, Nishikawa T, Iwai S, et al. Detailed low-dose study of 1,1-bis(p-chlorophenyl)-2,2,2-trichloroethane carcinogenesis suggests the possibility of a hormetic effect. *International journal of cancer*. 2002;99(1):112-8.

Sun C, Wei X, Fei Y, Su L, Zhao X, Chen G, et al. Mobile phone signal exposure triggers a hormesis-like effect in *Atm*^{+/+} and *Atm*^{-/-} mouse embryonic fibroblasts. *Scientific reports*. 2016;6:37423.

Sun H, Calabrese EJ, Zheng M, Wang D, Pan Y, Lin Z, et al. A swinging seesaw as a novel model mechanism for time-dependent hormesis under dose-dependent stimulatory and inhibitory effects: A case study on the toxicity of antibacterial chemicals to *Aliivibrio fischeri*. *Chemosphere*. 2018;205:15-23.

Sun H, Zheng M, Song J, Huang S, Pan Y, Gong R, et al. Multiple-species hormetic phenomena induced by indole: A case study on the toxicity of indole to bacteria, algae and human cells. *The Science of the total environment*. 2019;657:46-55.

Sun W, Yin X, Wang Y, Tan Y, Cai L, Wang B, et al. Intermittent hypoxia-induced renal antioxidants and oxidative damage in male mice: hormetic dose response. *Dose-response : a publication of International Hormesis Society*. 2012;11(3):385-400.

Sutou S, Koeda A, Komatsu K, Shiragiku T, Seki H, Yamakage K, et al. Collaborative study of thresholds for mutagens: proposal of a typical protocol for detection of hormetic responses in cytotoxicity tests. *Genes and environment : the official journal of the Japanese Environmental Mutagen Society*. 2018;40:20.

Sutou S. The 10th anniversary of the publication of genes and environment: memoir of establishing the Japanese environmental mutagen society and a proposal for a new collaborative study on mutagenic hormesis. *Genes and environment : the official journal of the Japanese Environmental Mutagen Society*. 2017;39:9.

Swaminathan S. Iron, hormesis, and protection in acute kidney injury. *Kidney international*. 2016;90(1):16-7.

Szumiel I. Radiation hormesis: Autophagy and other cellular mechanisms. *International journal of radiation biology*. 2012;88(9):619-28.

Tai S-H, Hung Y-C, Lee EJ, Lee A-C, Chen T-Y, Shen C-C, et al. Melatonin protects against transient focal cerebral ischemia in both reproductively active and estrogen-deficient female rats: the impact of circulating estrogen on its hormetic dose-response. *Journal of pineal research*. 2011;50(3):292-303.

Talsness CE, Chahoud I. Commentary on "Cancer biology and hormesis: human tumor cell lines commonly display hormetic (biphasic) dose responses" by Edward J. Calabrese. *Critical reviews in toxicology*. 2005;35(6):599-601.

Tan Q, Liu Z, Li H, Liu Y, Xia Z, Xiao Y, et al. Hormesis of mercuric chloride-human serum albumin adduct on N9 microglial cells via the ERK/MAPKs and JAK/STAT3 signaling pathways. *Toxicology*. 2018;408:62-9.

Tan Q, Zhang M, Geng L, Xia Z, Li C, Usman M, et al. Hormesis of methylmercury-human serum albumin conjugate on N9 microglia via ERK/MAPKs and STAT3 signaling pathways. *Toxicology and applied pharmacology*. 2019;362:59-66.

Tang FR, Loke WK. Molecular mechanisms of low dose ionizing radiation-induced hormesis, adaptive responses, radioresistance, bystander effects, and genomic instability. *International journal of radiation biology*. 2015;91(1):13-27.

Tang Q, Ma K, Chi H, Hou Y, Gao X. Transgenerational hormetic effects of sublethal dose of flupyradifurone on the green peach aphid, *Myzus persicae* (Sulzer) (Hemiptera: Aphididae). *PloS one*. 2019;14(1):e0208058.

Tasho RP, Shin WT, Cho JY. Acclimatization of *Pisum sativum* L., grown in soil contaminated with veterinary antibiotics, an attribute of dose hormetic response of root metabolites. *The Science of the total environment*. 2018;635:364-74.

Tedesco I, Russo M, Russo GL. Commentary on 'resveratrol commonly displays hormesis: occurrence and biomedical significance'. *Human & experimental toxicology*. 2010;29(12):1029-31.

Teeguarden JG, Dragan Y, Pitot HC. Hazard assessment of chemical carcinogens: the impact of hormesis. *Journal of applied toxicology : JAT*. 2000;20(2):113-20.

Teeguarden JG, Dragan YP, Pitot HC. Implications of hormesis on the bioassay and hazard assessment of chemical carcinogens. *Human & experimental toxicology*. 1998;17(5):254-8.

Thayer KA, Melnick R, Burns K, Davis D, Huff J. Fundamental flaws of hormesis for public health decisions. *Environmental health perspectives*. 2005;113(10):1271-6.

Thayer KA, Melnick R, Huff J, Burns K, Davis D. Hormesis: a new religion? *Environmental health perspectives*. 2006;114(11):A632-3.

Thomassen DG. Commentary on white paper the future of hormesis: where do we go from here? Edward J. Calabrese. *Critical reviews in toxicology*. 2001;31(4-5):665-7.

Thompson GA, Smithers J, Boxenbaum H. Biphasic mortality response of chipmunks in the wild to single doses of ionizing radiation: toxicity and longevity hormesis. *Drug metabolism reviews*. 1990;22(2-3):269-89.

Thompson RE. Epidemiological Evidence for Possible Radiation Hormesis from Radon Exposure: A Case-Control Study Conducted in Worcester, MA. Dose-response : a publication of International Hormesis Society. 2010;9(1):59-75.

Thong H-Y, Maibach HI. Hormesis biological effects of low level exposures (BELLE) and dermatology. Dose-response : a publication of International Hormesis Society. 2008;6(1):1-15.

Thong H-Y, Maibach HI. Hormesis biological effects of low-level exposure (B.E.L.L.E.) and dermatology. *Cutaneous and ocular toxicology*. 2007;26(4):329-41.

Thullen A. Diagnostic experiences with audiometry in varying pressure in auditory canal; modified Gelle's test. *Archiv fur Ohren-, Nasen- und Kehlkopfheilkunde*. 1954;164(4):328-57.

Totter JR. Physiology of the hormetic effect. *Health physics*. 1987;52(5):549-51.

Toussaint O, Remacle J, Dierick JF, Pascal T, Fripiat C, Magalhaes JP, et al. Hormesis: a quest for virtuality? *Human & experimental toxicology*. 2001;20(6):311-4; discussion 9-20.

Toussaint O, Remacle J, Dierick JF, Pascal T, Fripiat C, Royer V, et al. Approach of evolutionary theories of ageing, stress, senescence-like phenotypes, calorie restriction and hormesis from the view point of far-from-equilibrium thermodynamics. *Mechanisms of ageing and development*. 2002;123(8):937-46.

Tricoire-Leignel H, Thany SH, Gadenne C, Anton S. Pest insect olfaction in an insecticide-contaminated environment: info-disruption or hormesis effect. *Frontiers in physiology*. 2012;3:58.

Tsatsakis AM, Docea AO, Calina D, Buga AM, Zlatian O, Gutnikov S, et al. Hormetic Neurobehavioral effects of low dose toxic chemical mixtures in real-life risk simulation (RLRS) in rats. *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2019;125:141-9.

Tumbleson ME, Middleton CC, Tinsley OW, Hutcheson DP. Serum biochemic and hematologic parameters of Hormel miniature swine from four to nine months of age. *Laboratory animal care*. 1969;19(3):345-51.

Tuomisto J, Pekkanen J, Kiviranta H, Tukiainen E, Vartiainen T, Viluksela M, et al. Dioxin cancer risk--example of hormesis? Dose-response : a publication of International Hormesis Society. 2006;3(3):332-41.

Turturro A, Hass B, Hart RW. Hormesis--implications for risk assessment caloric intake (body weight) as an exemplar. *Human & experimental toxicology*. 1998;17(8):454-9.

Turturro A, Hass BS, Hart RW. Does caloric restriction induce hormesis? *Human & experimental toxicology*. 2000;19(6):320-9.

Turturro, Hass, Hart. Response to the commentaries on "Does caloric restriction induce hormesis?". *Human & experimental toxicology*. 2000;19(6):355-9.

Tyne W, Little S, Spurgeon DJ, Svendsen C. Hormesis depends upon the life-stage and duration of exposure: Examples for a pesticide and a nanomaterial. *Ecotoxicology and environmental safety*. 2015;120:117-23.

Ueki J-i, Shimada A, Sakagami H, Wakabayashi H. Hormetic and UV-protective effects of azulene-related compounds. *In vivo* (Athens, Greece). 2011;25(1):41-8.

Upadhyay RP. The Materialist View of Homeopathy: An Alternative Hypothesis and the Connection with Hormesis. *Homeopathy : the journal of the Faculty of Homeopathy*. 2018;107(1):46-9.

Upton AC. Comments on the article 'Defining hormesis', by EJ Calabrese and LA Baldwin. *Human & experimental toxicology*. 2002;21(2):111; discussion 3-4.

Upton AC. Radiation hormesis: data and interpretations. *Critical reviews in toxicology*. 2001;31(4-5):681-95.

Ursan G, Asgian B. Clinical contributions to the problem of hormetonia. *Rumanian medical review*. 1959;3(1):32-4.

Vaiserman AM, Litoshenko AI, Kvitnitskaia-Ryzhova TI, Koshel NM, Mozhukhina TG, Mikhal'skii SA, et al. Molecular and cellular aspects of radiation hormesis in *Drosophila melanogaster*. *TSitologiya i genetika*. 2003;37(3):41-8.

Vaiserman AM. Geroprotectors: specific action or hormesis? *Advances in gerontology = Uspekhi gerontologii*. 2008;21(4):564-9.

Vaiserman AM. Hormesis and epigenetics: is there a link? *Ageing research reviews*. 2011;10(4):413-21.

Vaiserman AM. Hormesis, adaptive epigenetic reorganization, and implications for human health and longevity. Dose-response : a publication of International Hormesis Society. 2010;8(1):16-21.

Vaiserman AM. Radiation hormesis: historical perspective and implications for low-dose cancer risk assessment. Dose-response : a publication of International Hormesis Society. 2010;8(2):172-91.

van der Schalie WH, Gentile JH. Ecological risk assessment: implications of hormesis. *Journal of applied toxicology : JAT*. 2000;20(2):131-9.

van der Woude H, Alink GM, Rietjens IMCM. The definition of hormesis and its implications for in vitro to in vivo extrapolation and risk assessment. *Critical reviews in toxicology*. 2005;35(6):603-7.

Van Voorhies WA. Hormesis and aging. *Human & experimental toxicology*. 2001;20(6):315-7; discussion 9-20.

Van Wijk R, Wiegant FAC. Postconditioning hormesis and the homeopathic Similia principle: molecular aspects. *Human & experimental toxicology*. 2010;29(7):561-5.

Van Wijk R, Wiegant FAC. Postconditioning hormesis and the similia principle. *Frontiers in bioscience (Elite edition)*. 2011;3:1128-38.

van Wyngaarden KE, Pauwels EK. Hormesis: are low doses of ionizing radiation harmful or beneficial? *European journal of nuclear medicine*. 1995;22(5):481-6.

Vargas AJ, Burd R. Hormesis and synergy: pathways and mechanisms of quercetin in cancer prevention and management. *Nutrition reviews*. 2010;68(7):418-28.

Vargas-Hernandez M, Macias-Bobadilla I, Guevara-Gonzalez RG, Romero-Gomez SdJ, Rico-Garcia E, Ocampo-Velazquez RV, et al. Plant Hormesis Management with Biostimulants of Biotic Origin in Agriculture. *Frontiers in plant science*. 2017;8:1762.

Vasylykowska R, Petriv N, Semchyshyn H. Carbon Sources for Yeast Growth as a Precondition of Hydrogen Peroxide Induced Hormetic Phenotype. *International journal of microbiology*. 2015;2015:697813.

Venkatasubramanian G. The 'Holy Grail' and 'Poisoned Chalice' Effects of Antipsychotics on Oxidative Stress in Schizophrenia: Can 'Hormesis' Explain this Paradox? *Indian journal of psychological medicine*. 2012;34(1):97-8.

Verbeke P, Clark BF, Rattan SI. Modulating cellular aging in vitro: hormetic effects of repeated mild heat stress on protein oxidation and glycation. *Experimental gerontology*. 2000;35(6-7):787-94.

Verbeke P, Deries M, Clark BFC, Rattan SIS. Hormetic action of mild heat stress decreases the inducibility of protein oxidation and glycooxidation in human fibroblasts. *Biogerontology*. 2002;3(1-2):117-20.

Verhaag EM, Buist-Homan M, Koehorst M, Groen AK, Moshage H, Faber KN. Hormesis in Cholestatic Liver Disease; Preconditioning with Low Bile Acid Concentrations Protects against Bile Acid-Induced Toxicity. *PloS one*. 2016;11(3):e0149782.

Videla LA. Hormetic responses of thyroid hormone calorigenesis in the liver: Association with oxidative stress. *IUBMB life*. 2010;62(6):460-6.

Visser B, Williams CM, Hahn DA, Short CA, Lopez-Martinez G. Hormetic benefits of prior anoxia exposure in buffering anoxia stress in a soil-pupating insect. *The Journal of experimental biology*. 2018;221(Pt 6).

Wakabayashi H, Narita T, Suga A, Sakagami H. Hormetic response of cultured normal and tumor cells to 2-aminotropone derivatives. *In vivo (Athens, Greece)*. 2010;24(1):39-44.

Walker VR. The cost of reducing scientific uncertainty concerning hormesis: a commentary on Professor Cross's paper. *Human & experimental toxicology*. 2001;20(3):159-61.

Wang C, Shi C, Liu L, Wang C, Qiao W, Gu Z, et al. Lanthanum Element Induced Imbalance of Mineral Nutrients, HSP 70 Production and DNA-Protein Crosslink, Leading to Hormetic Response of Cell Cycle Progression in Root Tips of *Vicia faba* L. seedlings. Dose-response : a publication of International Hormesis Society. 2012;10(1):96-107.

Wang C-R, Tian Y, Wang X-R, Yu H-X, Lu X-W, Wang C, et al. Hormesis effects and implicative application in assessment of lead-contaminated soils in roots of *Vicia faba* seedlings. *Chemosphere*. 2010;80(9):965-71.

Wang D, Calabrese EJ, Lian B, Lin Z, Calabrese V. Hormesis as a mechanistic approach to understanding herbal treatments in traditional Chinese medicine. *Pharmacology & therapeutics*. 2018;184:42-50.

Wang D, Lin Z, Wang T, Ding X, Liu Y. An analogous wood barrel theory to explain the occurrence of hormesis: A case study of sulfonamides and erythromycin on *Escherichia coli* growth. *PloS one*. 2017;12(7):e0181321.

Wang G, Tan Y, Zhang F, Li W, Yang L, Ma L. The study of low dose radiation inducing hormesis effect on hematopoietic system. *Zhonghua xue ye xue za zhi = Zhonghua xueyexue zazhi*. 2001;22(5):232-4.

Wang G. Hormesis, cell death, and regenerative medicine for neurodegenerative diseases. *Dose-response : a publication of International Hormesis Society*. 2013;11(2):238-54.

Wang GJ, Cai L. Induction of cell-proliferation hormesis and cell-survival adaptive response in mouse hematopoietic cells by whole-body low-dose radiation. *Toxicological sciences : an official journal of the Society of Toxicology*. 2000;53(2):369-76.

Wang L, Zou W, Zhong Y, An J, Zhang X, Wu M, et al. The hormesis effect of BDE-47 in HepG2 cells and the potential molecular mechanism. *Toxicology letters*. 2012;209(2):193-201.

Wang L-J, Liu S-S, Yuan J, Liu H-L. Remarkable hormesis induced by 1-ethyl-3-methyl imidazolium tetrafluoroborate on *Vibrio qinghaiensis* sp.-Q67. *Chemosphere*. 2011;84(10):1440-5.

Wang P, Ng Q, Zhang B, Wei Z, Hassan M, He Y, et al. Employing multi-omics to elucidate the hormetic response against oxidative stress exerted by nC60 on *Daphnia pulex*. *Environmental pollution (Barking, Essex : 1987)*. 2019;251:22-9.

Wang T, Wang D, Lin Z, An Q, Yin C, Huang Q. Prediction of mixture toxicity from the hormesis of a single chemical: A case study of combinations of antibiotics and quorum-sensing inhibitors with gram-negative bacteria. *Chemosphere*. 2016;150:159-67.

Webster EW. Hormesis and radiation protection. *Investigative radiology*. 1993;28(5):451-3.

Weis P, Weis JS. Cadmium acclimation and hormesis in *Fundulus heteroclitus* during fin regeneration. *Environmental research*. 1986;39(2):356-63.

Weis S, Rubio I, Ludwig K, Weigel C, Jentho E. Hormesis and Defense of Infectious Disease. *International journal of molecular sciences*. 2017;18(6).

Weltje L, vom Saal FS, Oehlmann J. Reproductive stimulation by low doses of xenoestrogens contrasts with the view of hormesis as an adaptive response. *Human & experimental toxicology*. 2005;24(9):431-7.

Wetzker R, Rubio I. Hormetic signaling patterns. Dose-response : a publication of International Hormesis Society. 2012;10(1):83-90.

Wiegant FAC, de Poot SAH, Boers-Trilles VE, Schreij AMA. Hormesis and Cellular Quality Control: A Possible Explanation for the Molecular Mechanisms that Underlie the Benefits of Mild Stress. Dose-response : a publication of International Hormesis Society. 2012;11(3):413-30.

Wiegant FAC, Prins HAB, Van Wijk R. Postconditioning hormesis put in perspective: an overview of experimental and clinical studies. Dose-response : a publication of International Hormesis Society. 2011;9(2):209-24.

Wiener JB. Hormesis and the radical moderation of law. *Human & experimental toxicology*. 2001;20(3):162-4.

Wiener JB. Hormesis, hotspots and emissions trading. *Human & experimental toxicology*. 2004;23(6):289-301; discussion 3-5.

Wilson R. Does caloric restriction cause hormesis? Comments on paper by Turturro, Hass and Hart. *Human & experimental toxicology*. 2000;19(6):353-9.

Wolff S. Are radiation-induced effects hormetic? *Science (New York, NY)*. 1989;245(4918):575, 621.

Xu Y-Q, Liu S-S, Wang Z-J, Li K, Qu R. Commercial personal care product mixtures exhibit hormetic concentration-responses to *Vibrio qinghaiensis* sp.-Q67. *Ecotoxicology and environmental safety*. 2018;162:304-11.

Yakovlev A, Tsodikov AD, Bass L. A stochastic model of hormesis. *Mathematical biosciences*. 1993;116(2):197-219.

Yanase S, Ishii N. Hyperoxia exposure induced hormesis decreases mitochondrial superoxide radical levels via Ins/IGF-1 signaling pathway in a long-lived age-1 mutant of *Caenorhabditis elegans*. *Journal of radiation research*. 2008;49(3):211-8.

Yang P, He X-Q, Peng L, Li A-P, Wang X-R, Zhou J-W, et al. The role of oxidative stress in hormesis induced by sodium arsenite in human embryo lung fibroblast (HELFI) cellular proliferation model. *Journal of toxicology and environmental health Part A*. 2007;70(11):976-83.

Yang P, Liu Q-z, Li A-p, Li T, Hong X, Zhou J-w. The relationship between hormesis of proliferation and oxidative stress induced by sodium arsenite in human embryo lung fibroblasts. *Zhonghua lao dong wei sheng zhi ye bing za zhi = Zhonghua laodong weisheng zhiyebing zazhi = Chinese journal of industrial hygiene and occupational diseases*. 2006;24(2):103-5.

Yao Z, Wang D, Wu X, Lin Z, Long X, Liu Y. Hormetic mechanism of sulfonamides on *Aliivibrio fischeri* luminescence based on a bacterial cell-cell communication. *Chemosphere*. 2019;215:793-9.

Yashin AI. Hormesis against aging and diseases: using properties of biological adaptation for health and survival improvement. Dose-response : a publication of International Hormesis Society. 2009;8(1):41-7.

Yi Y, Dou G, Yu Z, He H, Wang C, Li L, et al. Z-Ligustilide Exerted Hormetic Effect on Growth and Detoxification Enzymes of *Spodoptera litura* Larvae. *Evidence-based complementary and alternative medicine : eCAM*. 2018;2018:7104513.

Yokoo S, Furumoto K, Hiyama E, Miwa N. Slow-down of age-dependent telomere shortening is executed in human skin keratinocytes by hormesis-like-effects of trace hydrogen peroxide or by anti-oxidative effects of pro-vitamin C in common concurrently with reduction of intracellular oxidative stress. *Journal of cellular biochemistry*. 2004;93(3):588-97.

Yoshimasu T, Ohashi T, Oura S, Kokawa Y, Kawago M, Hirai Y, et al. A Theoretical Model for the Hormetic Dose-response Curve for Anticancer Agents. *Anticancer research*. 2015;35(11):5851-5.

You R, Sun H, Yu Y, Lin Z, Qin M, Liu Y. Time-dependent hormesis of chemical mixtures: A case study on sulfa antibiotics and a quorum-sensing inhibitor of *Vibrio fischeri*. *Environmental toxicology and pharmacology*. 2016;41:45-53.

Young JF, Bhattacharya S. Commentary on 'resveratrol commonly displays hormesis: occurrence and biomedical significance'. *Human & experimental toxicology*. 2010;29(12):1032-3.

Yu H-S, Liu Z-M, Yu X-Y, Song A-Q, Liu N, Wang H. Low-dose radiation induces antitumor effects and erythrocyte system hormesis. *Asian Pacific journal of cancer prevention : APJCP*. 2013;14(7):4121-6.

Yu M, Ying G. Hormesis of drugs for infectious diseases. *Yao xue xue bao = Acta pharmaceutica Sinica*. 2016;51(3):332-7.

Yuanqing H, Suhua W, Guangwei X, Chunlan R, Hai Q, Wenrong X, et al. Acrylonitrile has Distinct Hormetic Effects on Acetyl-Cholinesterase Activity in Mouse Brain and Blood that are Modulated by Ethanol. Dose-response : a publication of International Hormesis Society. 2013;11(1):49-59.

Zanuncio JC, Jusselino-Filho P, Ribeiro RC, Zanuncio TV, Ramalho FdS, Serrao JE. Hormetic responses of a stinkbug predator to sublethal doses of pyrethroid. Bulletin of environmental contamination and toxicology. 2011;87(6):608-14.

Zapponi GA, Marcello I. Low-dose risk, hormesis, analogical and logical thinking. Annals of the New York Academy of Sciences. 2006;1076:839-57.

Zeiger E, Hoffmann GR. An illusion of hormesis in the Ames test: statistical significance is not equivalent to biological significance. Mutation research. 2012;746(1):89-93.

Zemva J, Fink CA, Fleming TH, Schmidt L, Loft A, Herzig S, et al. Hormesis enables cells to handle accumulating toxic metabolites during increased energy flux. Redox biology. 2017;13:674-86.

Zhang C, Chen S, Bao J, Zhang Y, Huang B, Jia X, et al. Low Doses of Camptothecin Induced Hormetic and Neuroprotective Effects in PC12 Cells. Dose-response : a publication of International Hormesis Society. 2015;13(2):1559325815592606.

Zhang C, Li C, Chen S, Li Z, Jia X, Wang K, et al. Berberine protects against 6-OHDA-induced neurotoxicity in PC12 cells and zebrafish through hormetic mechanisms involving PI3K/AKT/Bcl-2 and Nrf2/HO-1 pathways. Redox biology. 2017;11:1-11.

Zhang C, Li C, Chen S, Li Z, Ma L, Jia X, et al. Hormetic effect of panaxatriol saponins confers neuroprotection in PC12 cells and zebrafish through PI3K/AKT/mTOR and AMPK/SIRT1/FOXO3 pathways. Scientific reports. 2017;7:41082.

Zhang J, Liu S-S, Yu Z-Y, Liu H-L, Zhang J. The time-dependent hormetic effects of 1-alkyl-3-methylimidazolium chloride and their mixtures on *Vibrio qinghaiensis* sp. -Q67. Journal of hazardous materials. 2013;258-259:70-6.

Zhang J, Liu S-S, Yu Z-Y, Zhang J. Time-dependent hormetic effects of 1-alkyl-3-methylimidazolium bromide on *Vibrio qinghaiensis* sp.-Q67: luminescence, redox reactants and antioxidases. Chemosphere. 2013;91(4):462-7.

Zhang J, Liu S-S, Zhu X-W. Benefits from hazards: mixture hormesis induced by emim Cl despite its individual inhibitions. *Chemosphere*. 2014;112:420-6.

Zhang L, Tian Y, Wu Y, Zhang H, Wang Z, Huo H, et al. Low-dose radiation-induced hormetic effect on hematopoietic reconstitution. *International journal of radiation biology*. 2010;86(4):329-33.

Zhang Q, Pi J, Woods CG, Andersen ME. Phase I to II cross-induction of xenobiotic metabolizing enzymes: a feedforward control mechanism for potential hormetic responses. *Toxicology and applied pharmacology*. 2009;237(3):345-56.

Zhang Q, Pi J, Woods CG, Jarabek AM, Clewell HJ, 3rd, Andersen ME. Hormesis and adaptive cellular control systems. Dose-response : a publication of International Hormesis Society. 2008;6(2):196-208.

Zhang R, Zhang Y, Xu Q, Li J, Zhu F. Hormetic Effects of Mixtures of Dimethachlone and Prochloraz on *Sclerotinia sclerotiorum*. *Plant disease*. 2019;103(3):546-54.

Zhang S, Peng J. Response to: "Hormetic effect of *Rosa laevigata* Michx in CCl₄-induced hepatotoxicity and the presumptive role of PPARs". *Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association*. 2013;57:389.

Zhang WZ, Sun NN, Ma SQ, Zhao ZC, Cao Y, Zhang C. Hormetic Effects of Yttrium on Male Sprague-Dawley Rats. *Biomedical and environmental sciences : BES*. 2018;31(10):777-80.

Zhang Y, Lu R, Liu W, Wu Y, Qian H, Zhao X, et al. Hormetic effects of acute methylmercury exposure on grp78 expression in rat brain cortex. Dose-response : a publication of International Hormesis Society. 2013;11(1):109-20.

Zhang Y, Shen G, Yu Y, Zhu H. The hormetic effect of cadmium on the activity of antioxidant enzymes in the earthworm *Eisenia fetida*. *Environmental pollution (Barking, Essex : 1987)*. 2009;157(11):3064-8.

Zhao H, Joo S, Xie W, Ji X. Using hormetic strategies to improve ischemic preconditioning and postconditioning against stroke. *International journal of physiology, pathophysiology and pharmacology*. 2013;5(2):61-72.

Zhou DR, Eid R, Miller KA, Boucher E, Mandato CA, Greenwood MT. Intracellular second messengers mediate stress inducible hormesis and Programmed Cell Death: A review. *Biochimica et biophysica acta Molecular cell research*. 2019;1866(5):773-92.

Zhou Q, Li F, Ge F, Liu N, Kuang Y. Nutrient removal by *Chlorella vulgaris* F1068 under cetyltrimethyl ammonium bromide induced hormesis. *Environmental science and pollution research international*. 2016;23(19):19450-60.

Zhu C-J, Peng Y, Tong Z-H, Lu L-Y, Cui Y-H, Yu H-Q. Hormetic effect and mechanism of imidazolium-based ionic liquids on the nematode *Caenorhabditis elegans*. *Chemosphere*. 2016;157:65-70.

Zhu X-W, Liu S-S, Qin L-T, Chen F, Liu H-L. Modeling non-monotonic dose-response relationships: model evaluation and hormetic quantities exploration. *Ecotoxicology and environmental safety*. 2013;89:130-6.

Zied DC, Dourado FA, Dias ES, Pardo-Gimenez A. First study of hormesis effect on mushroom cultivation. *World journal of microbiology & biotechnology*. 2017;33(11):195.

Zierau G. General survey on the development & present-day status of audiometry & hearing improvement. *Die Medizinische*. 1957;2(10):339-48.

Zimmermann A, Bauer MA, Kroemer G, Madeo F, Carmona-Gutierrez D. When less is more: hormesis against stress and disease. *Microbial cell* (Graz, Austria). 2014;1(5):150-3.

Zoladz PR, Diamond DM. Linear and non-linear dose-response functions reveal a hormetic relationship between stress and learning. *Dose-response : a publication of International Hormesis Society*. 2008;7(2):132-48.

Zollner F, Hahlbrock KH. Experiences in above-threshold audiometry. *Zeitschrift für Laryngologie, Rhinologie, Otologie und ihre Grenzgebiete*. 1952;31(6):245-58.

Zollner F, Hahlbrock. Experiences with above threshold hearing determinations. *Zeitschrift für Laryngologie, Rhinologie, Otologie und ihre Grenzgebiete*. 1952;31(7-8):309-22.

Zou X, Lin Z, Deng Z, Yin D. Novel approach to predicting hormetic effects of antibiotic mixtures on *Vibrio fischeri*. *Chemosphere*. 2013;90(7):2070-6.

Zou X, Xiao X, He Y, Hu L, Hu C, Huang X. Hormetic effects of metal ions upon *V. fischeri* and the application of a new parameter for the quantitative assessment of hormesis. *Journal of hazardous materials*. 2017;322(Pt B):454-60.

D. Under-Reporting and Publication Bias in the Biomedical Literature

[Anonymous]. Paucity of negative clinical trials reports and publication bias. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*. 23:1. 7. 2014.

Abaid LN, Grimes DA, Schulz KF. Reducing publication bias of prospective clinical trials through trial registration. *Contraception*. 2007;76(5):339-41.

Abaid LN, Grimes DA, Schulz KF. Reducing publication bias through trial registration. *Obstetrics and gynecology*. 2007;109(6):1434-7.

Abbot JM, Thomson CA, Ranger-Moore J, Teixeira PJ, Lohman TG, Taren DL, et al. Psychosocial and behavioral profile and predictors of self-reported energy underreporting in obese middle-aged women. *Journal of the American Dietetic Association*. 2008;108(1):114-9.

Abdool Karim SS, Abdool Karim Q. Under-reporting in hepatitis B notifications. *South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde*. 1991;79(5):242-4.

Abdool Karim SS, Dilraj A. Reasons for under-reporting of notifiable conditions. *South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde*. 1996;86(7):834-6.

Abeyseena C, Poddalgoda I. Quality of reporting clinical trials published in five leading Sri Lankan medical journals. *Journal of evidence-based medicine*. 2013;6(4):243-9.

Abouchadi S, Zhang W-H, De Brouwere V. Underreporting of deaths in the maternal deaths surveillance system in one region of Morocco. *PloS one*. 2018;13(1):e0188070.

Acar F, Seurinck R, Eickhoff SB, Moerkerke B. Assessing robustness against potential publication bias in Activation Likelihood Estimation (ALE) meta-analyses for fMRI. *PloS one*. 2018;13(11):e0208177.

Adams AS, Soumerai SB, Lomas J, Ross-Degnan D. Evidence of self-report bias in assessing adherence to guidelines. *International journal for quality in health care*

: journal of the International Society for Quality in Health Care. 1999;11(3):187-92.

Adams YJ, Kamp K, Liu CC, Stommel M, Thana K, Broome ME, et al. Revisiting the Quality of Reporting Randomized Controlled Trials in Nursing Literature. *Journal of nursing scholarship : an official publication of Sigma Theta Tau International Honor Society of Nursing*. 2018;50(2):200-9.

Adanaque-Gomez M, Loro-Gomez A, Purizaca-Rosillo N. Underreporting of health personnel accidents caused by sharp objects in a hospital of Piura, Peru. *Revista peruana de medicina experimental y salud publica*. 2014;31(1):169-80.

Agema WRP, Jukema JW, Zwinderman AH, van der Wall EE. A meta-analysis of the angiotensin-converting enzyme gene polymorphism and restenosis after percutaneous transluminal coronary revascularization: evidence for publication bias. *American heart journal*. 2002;144(5):760-8.

Aggarwal P, Varshney S, Kandpal SD, Gupta D. Tobacco Smoking Status as Assessed by Oral Questionnaire Results 30% Under-reporting by Adult Males in Rural India: A Confirmatory Comparison by Exhaled Breath Carbon Monoxide Analysis. *Journal of family medicine and primary care*. 2014;3(3):199-203.

Agran M, Moore S, Martin JE. Research in mental retardation: underreporting of medication information. *Research in developmental disabilities*. 1988;9(4):351-7.

Aguilar-Salinas P, Gonsales D, Brasiliense LB, Sauvageau E, Hanel RA. High-energy Trauma Precipitating Intramedullary Cavernous Malformation Hemorrhage - A Possible Underreported Mechanism. *Cureus*. 2017;9(3):e1092.

Ahmed I, Sutton AJ, Riley RD. Assessment of publication bias, selection bias, and unavailable data in meta-analyses using individual participant data: a database survey. *BMJ (Clinical research ed)*. 2012;344:d7762.

Alaguney ME, Yildiz AN, Demir AU, Ergor OA. Physicians' opinions about the causes of underreporting of occupational diseases. *Archives of environmental & occupational health*. 2019:1-9.

Alatawi YM, Hansen RA. Empirical estimation of under-reporting in the U.S. Food and Drug Administration Adverse Event Reporting System (FAERS). Expert opinion on drug safety. 2017;16(7):761-7.

Albarqouni LN, Lopez-Lopez JA, Higgins JPT. Indirect evidence of reporting biases was found in a survey of medical research studies. Journal of clinical epidemiology. 2017;83:57-64.

Alfonso JH, Lovseth EK, Samant Y, Holm J-O. Work-related skin diseases in Norway may be underreported: data from 2000 to 2013. Contact dermatitis. 2015;72(6):409-12.

Alinaghi N, Reed WR. Meta-analysis and publication bias: How well does the FAT-PET-PEESE procedure work? Research synthesis methods. 2018;9(2):285-311.

Al-Laham H, Khoury R, Bashour H. Reasons for underreporting of notifiable diseases by Syrian paediatricians. Eastern Mediterranean health journal = La revue de sante de la Mediterranee orientale = al-Majallah al-sihhiyah li-sharq al-mutawassit. 2001;7(4-5):590-6.

Allison DB, Faith MS, Gorman BS. Publication bias in obesity treatment trials? International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity. 1996;20(10):931-7.

Al-Marzouki S, Roberts I, Evans S, Marshall T. Selective reporting in clinical trials: analysis of trial protocols accepted by The Lancet. Lancet (London, England). 2008;372(9634):201.

Al-Namankany AA, Ashley P, Moles DR, Parekh S. Assessment of the quality of reporting of randomized clinical trials in paediatric dentistry journals. International journal of paediatric dentistry. 2009;19(5):318-24.

Alsop J, Langley J. Under-reporting of motor vehicle traffic crash victims in New Zealand. Accident; analysis and prevention. 2001;33(3):353-9.

Alter MJ, Mares A, Hadler SC, Maynard JE. The effect of underreporting on the apparent incidence and epidemiology of acute viral hepatitis. American journal of epidemiology. 1987;125(1):133-9.

Altman DG, Sauerbrei W, McShane LM. Importance of the distinction between quality of methodology and quality of reporting. *HPB : the official journal of the International Hepato Pancreato Biliary Association*. 2017;19(7):649-50.

Altwaairgi AK, Alfakeeh AH, Hopman WM, Parulekar WR. Quality of reporting of chemotherapy compliance in randomized controlled trials of breast cancer treatment. *Japanese journal of clinical oncology*. 2015;45(6):520-6.

Alvarez F, Meyer N, Gourraud PA, Paul C. CONSORT adoption and quality of reporting of randomized controlled trials: a systematic analysis in two dermatology journals. *The British journal of dermatology*. 2009;161(5):1159-65.

Alvarez-Requejo A, Carvajal A, Begaud B, Moride Y, Vega T, Arias LH. Under-reporting of adverse drug reactions. Estimate based on a spontaneous reporting scheme and a sentinel system. *European journal of clinical pharmacology*. 1998;54(6):483-8.

Amoros E, Martin J-L, Laumon B. Under-reporting of road crash casualties in France. *Accident; analysis and prevention*. 2006;38(4):627-35.

Amos AJ. Biased reporting of results in patients at ultra-high risk of psychosis. *The Journal of clinical psychiatry*. 2013;74(11):1123.

Andersen-Ranberg K, Fjederholt KT, Madzak A, Nybo M, Jeune B. Cardiovascular diseases are largely underreported in Danish centenarians. *Age and ageing*. 2013;42(2):249-53.

Anderson HR, Atkinson RW, Peacock JL, Sweeting MJ, Marston L. Ambient particulate matter and health effects: publication bias in studies of short-term associations. *Epidemiology (Cambridge, Mass)*. 2005;16(2):155-63.

Anderson SF, Kelley K, Maxwell SE. Sample-Size Planning for More Accurate Statistical Power: A Method Adjusting Sample Effect Sizes for Publication Bias and Uncertainty. *Psychological science*. 2017;28(11):1547-62.

Andersson E, Toren K. Pleural mesotheliomas are underreported as occupational cancer in Sweden. *American journal of industrial medicine*. 1995;27(4):577-80.

Andresen EM, Lee JA, Pecoraro RE, Koepsell TD, Hallstrom AP, Siscovick DS. Underreporting of diabetes on death certificates, King County, Washington. *American journal of public health*. 1993;83(7):1021-4.

Andresen EM, Lee JA, Pecoraro RE. Underreporting of diabetes on death certificates. *Diabetes care*. 1991;14(4):352-3.

Andrews JF. Reading and deafness is a biased publication. *American annals of the deaf*. 1988;133(1):4.

Andrews PW, Kendler KS, Gillespie N, Neale MC. The sensitivity of variance component estimates to underreporting: method and application to substance abuse data. *Twin research and human genetics : the official journal of the International Society for Twin Studies*. 2007;10(5):721-8.

Anestis MD, Mohn RS, Dorminey JW, Green BA. Detecting Potential Underreporting of Suicide Ideation Among U.S. Military Personnel. *Suicide & life-threatening behavior*. 2019;49(1):210-20.

Anglemyer AT, Krauth D, Bero L. Industry sponsorship and publication bias among animal studies evaluating the effects of statins on atherosclerosis and bone outcomes: a meta-analysis. *BMC medical research methodology*. 2015;15:12.

Angouras DC, Dosios T. Pericardial decompression syndrome: a term for a well-defined but rather underreported complication of pericardial drainage. *The Annals of thoracic surgery*. 2010;89(5):1702-3; author reply 3.

Annett M. Left-handedness as a function of sex, maternal versus paternal inheritance, and report bias. *Behavior genetics*. 1999;29(2):103-14.

Antes G, Chalmers I. Under-reporting of clinical trials is unethical. *Lancet* (London, England). 2003;361(9362):978-9.

Anthony S, van der Pal-de Bruin KM, Graafmans WC, Dorrepaal CA, Borkent-Polet M, van Hemel OJ, et al. The reliability of perinatal and neonatal mortality rates: differential under-reporting in linked professional registers vs. Dutch civil registers. *Paediatric and perinatal epidemiology*. 2001;15(3):306-14.

Antoniello D, Kluger BM, Sahlein DH, Heilman KM. Phantom limb after stroke: an underreported phenomenon. *Cortex; a journal devoted to the study of the nervous system and behavior*. 2010;46(9):1114-22.

Anttila H, Malmivaara A, Kunz R, Autti-Ramo I, Makela M. Quality of reporting of randomized, controlled trials in cerebral palsy. *Pediatrics*. 2006;117(6):2222-30.

Anwar H, Fischbacher CM, Leese GP, Lindsay RS, McKnight JA, Wild SH, et al. Assessment of the under-reporting of diabetes in hospital admission data: a study from the Scottish Diabetes Research Network Epidemiology Group. *Diabetic medicine : a journal of the British Diabetic Association*. 2011;28(12):1514-9.

Anwar Z, Zan E, Gujar SK, Sciubba DM, Riley LH, 3rd, Gokaslan ZL, et al. Adult lumbar scoliosis: underreported on lumbar MR scans. *AJNR American journal of neuroradiology*. 2010;31(5):832-7.

Arantes GR, Ruffino-Netto A. Trends in the under-reporting of cases during the outbreak of meningococcal meningitis occurring in the State of Sao Paulo, Brazil, in the period 1971/75. *Revista de saude publica*. 1977;11(2):182-7.

Arbaizar B, Gomez-Acebo I, Llorca J. Quality of reporting controlled clinical trials on treatment of the acute mania phase of bipolar disorder with new antipsychotic drugs. *Pharmacopsychiatry*. 2008;41(6):240-1.

Armijo-Olivo S, Gadotti I, Kornerup M, Lagravere MO, Flores-Mir C. Quality of reporting masticatory muscle electromyography in 2004: a systematic review. *Journal of oral rehabilitation*. 2007;34(6):397-405.

Arnetz JE, Hamblin L, Ager J, Luborsky M, Upfal MJ, Russell J, et al. Underreporting of Workplace Violence: Comparison of Self-Report and Actual Documentation of Hospital Incidents. *Workplace health & safety*. 2015;63(5):200-10.

Arnold FW. Laparoscopy complications. Understating under-reporting. *BMJ (Clinical research ed)*. 2011;342:d793.

Arnoldussen M, Schimmel H, Op de Coul E, van den Hof S, de Vries G. Tuberculosis patients with unknown HIV status in the Netherlands: analysing underreporting and lack of testing. *The European respiratory journal*. 2017;50(5).

Arnup SJ, Forbes AB, Kahan BC, Morgan KE, McKenzie JE. The quality of reporting in cluster randomised crossover trials: proposal for reporting items and an assessment of reporting quality. *Trials*. 2016;17(1):575.

Arseneau KKO, Cominelli F. Improving the Reproducibility and Quality of Reporting for Animal Studies in Inflammatory Bowel Disease. *Inflammatory bowel diseases*. 2017;23(12):2069-71.

Asbeck I, Mast M, Bierwag A, Westenhofer J, Acheson KJ, Muller MJ. Severe underreporting of energy intake in normal weight subjects: use of an appropriate standard and relation to restrained eating. *Public health nutrition*. 2002;5(5):683-90.

Asfari H, Bousquet C, Trombert Paviot B, Bellet F, Mounier G, Marsille F, et al. Drug-related anaphylactic shocks: under-reporting and PMSI. *Thérapie*. 2014;69(6):483-90.

Asher GN, Motsinger-Reif AA, Jonas DE, Viera AJ. Quality of reporting on randomised controlled trials of auriculotherapy for pain. *Acupuncture in medicine : journal of the British Medical Acupuncture Society*. 2011;29(2):122-6.

Astrup A, Madsbad S, Breum L, Jensen TJ, Kroustrup JP, Larsen TM. Under-reporting of adverse effects of tesofensine. *Lancet (London, England)*. 2013;382(9887):127.

Atakpo P, Vassar M. Cumulative meta-analysis by precision as a method to evaluate publication bias. *Journal of dermatological science*. 2016;83(3):251-3.

Atakpo P, Vassar M. Publication bias in dermatology systematic reviews and meta-analyses. *Journal of dermatological science*. 2016;82(2):69-74.

Atallah AN. Dealing with publication bias. *Sao Paulo medical journal = Revista paulista de medicina*. 1997;115(5):1527-8.

Atkins KE, Wenzel NS, Ndeffo-Mbah M, Altice FL, Townsend JP, Galvani AP. Under-reporting and case fatality estimates for emerging epidemics. *BMJ (Clinical research ed)*. 2015;350:h1115.

Au E, Gossage JA, Bailey SR. The reporting of needlestick injuries sustained in theatre by surgeons: are we under-reporting? *The Journal of hospital infection*. 2008;70(1):66-70.

Auerbach A, Mulvaney P, Goldberg D, Foley E, Maloney M. Single-Cell Squamous Carcinoma: An Underreported High-Risk Variant. *Dermatologic surgery* : official publication for American Society for Dermatologic Surgery [et al]. 2016;42 Suppl 1:S2-7.

Auerbach JD, McGowan KB, Halevi M, Gerling MC, Sharan AD, Whang PG, et al. Mitigating adverse event reporting bias in spine surgery. *The Journal of bone and joint surgery American volume*. 2013;95(16):1450-6.

Augusteijn HEM, van Aert RCM, van Assen MALM. The effect of publication bias on the Q test and assessment of heterogeneity. *Psychological methods*. 2019;24(1):116-34.

Austin R, Thompson B, Coory M, Walpole E, Francis G, Fritschi L. Histopathology reporting of breast cancer in Queensland: the impact on the quality of reporting as a result of the introduction of recommendations. *Pathology*. 2009;41(4):361-5.

Autorino R, Borges C, White MA, Altunrende F, Perdoni S, Haber G-P, et al. Randomized clinical trials presented at the World Congress of Endourology: how is the quality of reporting? *Journal of endourology*. 2010;24(12):2067-73.

Avelino GF, Previdelli AN, Castro MAd, Marchioni DML, Fisberg RM. Underreporting of energy intake and associated factors in a population-based study. *Cadernos de saude publica*. 2014;30(3):663-8.

Avong YK, Jatau B, Gurumnaan R, Danat N, Okuma J, Usman I, et al. Addressing the under-reporting of adverse drug reactions in public health programs controlling HIV/AIDS, Tuberculosis and Malaria: A prospective cohort study. *PloS one*. 2018;13(8):e0200810.

Awad M. Publication bias in clinical trials. *Journal (Canadian Dental Association)*. 2010;76:a175.

Ayiomamitis A. A computer algorithm for the assessment of age reporting bias in censal population estimates using Myers' 'blended' method. *Computer methods and programs in biomedicine*. 1985;21(2):107-11.

Azadi A, Anoosheh M, Delpisheh A. Frequency and barriers of underreported needlestick injuries amongst Iranian nurses, a questionnaire survey. *Journal of clinical nursing*. 2011;20(3-4):488-93.

Azarakhsh N, Grimes S, Notrica DM, Raines A, Garcia NM, Tuggle DW, et al. Blunt cerebrovascular injury in children: underreported or underrecognized?: A multicenter ATOMAC study. *The journal of trauma and acute care surgery*. 2013;75(6):1006-11; discussion 11-2.

Azaroff LS, Levenstein C, Wegman DH. Occupational injury and illness surveillance: conceptual filters explain underreporting. *American journal of public health*. 2002;92(9):1421-9.

Azevedo-Silva F, Reis RdS, Santos MdO, Luiz RR, Pombo-de-Oliveira MS. Evaluation of childhood acute leukemia incidence and underreporting in Brazil by capture-recapture methodology. *Cancer epidemiology*. 2009;33(6):403-5.

Aziz Z, Siang TC, Badarudin NS. Reporting of adverse drug reactions: predictors of under-reporting in Malaysia. *Pharmacoepidemiology and drug safety*. 2007;16(2):223-8.

Bacchetti P. The impact of lengthening AIDS reporting delays and uncertainty about underreporting on incidence trends and projections. *Journal of acquired immune deficiency syndromes*. 1994;7(8):860-5.

Bachelet VC, Pardo-Hernandez H. Quality of reporting and risk of bias of randomized clinical trials published in Spanish and Latin American journals. *Medwave*. 2019;19(1):e7573.

Bachrach CA, Baldwin W. Abortion underreporting. *Family planning perspectives*. 1991;23(5):233.

Backstrom M, Mjorndal T, Dahlqvist R. Under-reporting of serious adverse drug reactions in Sweden. *Pharmacoepidemiology and drug safety*. 2004;13(7):483-7.

Baer RA, Miller J. Underreporting of psychopathology on the MMPI-2: a meta-analytic review. *Psychological assessment*. 2002;14(1):16-26.

Baer RA, Sekirnjak G. Detection of underreporting on the MMPI-2 in a clinical population: effects of information about validity scales. *Journal of personality assessment*. 1997;69(3):555-67.

Baer RA, Wetter MW. Effects of information about validity scales on underreporting of symptoms on the personality assessment inventory. *Journal of personality assessment*. 1997;68(2):402-13.

Bagby RM, Marshall MB. Assessing underreporting response bias on the MMPI-2. *Assessment*. 2004;11(2):115-26.

Bahor Z, Liao J, Macleod MR, Bannach-Brown A, McCann SK, Wever KE, et al. Risk of bias reporting in the recent animal focal cerebral ischaemia literature. *Clinical science (London, England : 1979)*. 2017;131(20):2525-32.

Bahorik AL, Newhill CE, Queen CC, Eack SM. Letter to the editor: Critique of Bahorik et al. (2013)--'Underreporting of drug use among individuals with schizophrenia: prevalence and predictors'--a reply. *Psychological medicine*. 2014;44(3):670-1.

Bahorik AL, Newhill CE, Queen CC, Eack SM. Under-reporting of drug use among individuals with schizophrenia: prevalence and predictors. *Psychological medicine*. 2014;44(1):61-9.

Bailey RL, Mitchell DC, Miller C, Smiciklas-Wright H. Assessing the effect of underreporting energy intake on dietary patterns and weight status. *Journal of the American Dietetic Association*. 2007;107(1):64-71.

Baker R, Jackson D. Using journal impact factors to correct for the publication bias of medical studies. *Biometrics*. 2006;62(3):785-92.

Baldwin K, Ginsberg P, Harkaway RC. Under-reporting of erectile dysfunction among men with unrelated urologic conditions. *International journal of impotence*

Barbui C, Cipriani A. Publication bias in systematic reviews. *Archives of general psychiatry*. 2007;64(7):868.

Bardy AH. Report bias in drug research. *Therapie*. 1996;51(4):382-3.

Barg MS, Huether CA. A study of underreporting of Down's syndrome on birth certificates in an Ohio County, 1970-78. *Public health reports (Washington, DC : 1974)*. 1983;98(1):78-84.

Bariani GM, de Celis Ferrari ACR, Precivale M, Arai R, Saad ED, Riechelmann RP. Sample Size Calculation in Oncology Trials: Quality of Reporting and Implications for Clinical Cancer Research. *American journal of clinical oncology*. 2015;38(6):570-4.

Bar-Oz B, Moretti ME, Mareels G, Van Tittelboom T, Koren G. Reporting bias in retrospective ascertainment of drug-induced embryopathy. *Lancet (London, England)*. 1999;354(9191):1700-1.

Barreto JN, de Lourdes Monteiro M, da Luz Lima M, Valadas E, Hanscheid T. Under-reporting of tuberculosis in Praia, Cape Verde: study reports doubtful results. *The international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease*. 2018;22(9):1106.

Barros AJD, Amaral RL, Oliveira MSB, Lima SC, Goncalves EV. Traffic accidents resulting in injuries: underreporting, characteristics, and case fatality rate. *Cadernos de saude publica*. 2003;19(4):979-86.

Bartalena T, Giannelli G, Rinaldi MF, Rimondi E, Rinaldi G, Sverzellati N, et al. Prevalence of thoracolumbar vertebral fractures on multidetector CT: underreporting by radiologists. *European journal of radiology*. 2009;69(3):555-9.

Batham A, Gupta MA, Rastogi P, Garg S, Sreenivas V, Puliyl JM. Calculating prevalence of hepatitis B in India: using population weights to look for publication bias in conventional meta-analysis. *Indian journal of pediatrics*. 2009;76(12):1247-57.

Baughan CJ. Under-reporting of accidents. *Occupational health; a journal for occupational health nurses*. 1974;26(1):16-7.

Bax L, Moons KG. Beyond publication bias. *Journal of clinical epidemiology*. 2011;64(5):459-62.

Bazanelli AP, Kamimura MA, Vasselai P, Draibe SA, Cuppari L. Underreporting of energy intake in peritoneal dialysis patients. *Journal of renal nutrition : the official journal of the Council on Renal Nutrition of the National Kidney Foundation*. 2010;20(4):263-9.

Bazelier M, de Boer A, de Vries F. Acid suppressants and hip fracture: duplicate publication bias? *Bone*. 2011;49(4):920; author reply 1.

Beall DP, Tutton SM, Murphy K, Olan W, Warner C, Test JB. Analysis of Reporting Bias in Vertebral Augmentation. *Pain physician*. 2017;20(7):E1081-E90.

Becker W, Foley S, Shelley E, Gibney M. Energy under-reporting in Swedish and Irish dietary surveys: implications for food-based dietary guidelines. *The British journal of nutrition*. 1999;81 Suppl 2:S127-31.

Becker W, Welten D. Under-reporting in dietary surveys--implications for development of food-based dietary guidelines. *Public health nutrition*. 2001;4(2B):683-7.

Bedard D, Shatenstein B, Nadon S. Underreporting of energy intake from a self-administered food-frequency questionnaire completed by adults in Montreal. *Public health nutrition*. 2004;7(5):675-81.

Begg C, Cho M, Eastwood S, Horton R, Moher D, Olkin I, et al. Improving the quality of reporting of randomized controlled trials. The CONSORT statement. *Jama*. 1996;276(8):637-9.

Begg CB, Berlin JA. Publication bias and dissemination of clinical research. *Journal of the National Cancer Institute*. 1989;81(2):107-15.

Begg CB. A comparison of methods to detect publication bias in meta-analysis by P. Macaskill, S. D. Walter and L. Irwig, *Statistics in Medicine*, 2001; 20:641-654. *Statistics in medicine*. 2002;21(12):1803; author reply 4.

Begum R, Kolstoe S. Can UK NHS research ethics committees effectively monitor publication and outcome reporting bias? *BMC medical ethics*. 2015;16:51.

Behera B, Das A, Mathur P, Kapil A. High prevalence of carbapenem resistant *Pseudomonas aeruginosa* at a tertiary care centre of north India. Are we under-reporting? *The Indian journal of medical research*. 2008;128(3):324-5.

Behera SK, Das S, Chengappa KG, Xavier AS, Selvarajan S. Multiple Drug Intolerance Syndrome: An Underreported Distinct Clinical Entity. *Current clinical pharmacology*. 2018.

Bello S, Moustgaard H, Hrobjartsson A. The risk of unblinding was infrequently and incompletely reported in 300 randomized clinical trial publications. *Journal of clinical epidemiology*. 2014;67(10):1059-69.

Ben Amor Y, Nemser B, Singh A, Sankin A, Schluger N. Underreported threat of multidrug-resistant tuberculosis in Africa. *Emerging infectious diseases*. 2008;14(9):1345-52.

Benavides FG, Perez G, Martinez J, Martinez JM, Gispert R, Benach J. Underreporting of fatal occupational injuries in Catalonia (Spain). *Occupational medicine (Oxford, England)*. 2004;54(2):110-4.

Bendtsen C. Prediction of human major histocompatibility complex class II binding peptides: a frequent case of publication bias? *Artificial intelligence in medicine*. 2012;55(3):209.

Benitez Rodriguez E, Ruiz Moruno AJ, Cordoba Dona JA, Escolar Pujolar A, Lopez Fernandez FJ. Underreporting of percutaneous exposure accidents in a teaching hospital in Spain. *Clinical performance and quality health care*. 1999;7(2):88-91.

Benito-Leon J, Louis ED, Villarejo-Galende A, Romero JP, Bermejo-Pareja F. Under-reporting of Parkinson's disease on death certificates: a population-based study (NEDICES). *Journal of the neurological sciences*. 2014;347(1-2):188-92.

Bennett CL, McDonald DA, Chang Y, Finch A, Vuong K, Rennie S, et al. A National Cross-Sectional Study of Surgery Residents Who Underreport Duty Hours. *Journal of surgical education*. 2017;74(6):928-33.

Bennett DA, Latham NK, Stretton C, Anderson CS. Capture-recapture is a potentially useful method for assessing publication bias. *Journal of clinical epidemiology*. 2004;57(4):349-57.

Bennett JM, Hamblin TJ. Under-reporting of clinical trials is a well known 'occupational hazard'. *Leukemia research*. 1998;22(10):v-vii, ix.

Ben-Shlomo Y, Smith GD. "Place of publication" bias? *BMJ (Clinical research ed)*. 1994;309(6949):274.

Bergendal B. Interpretive and report bias in publications on implants in patients with ectodermal dysplasia. *The International journal of prosthodontics*. 2011;24(6):505-6.

Berle D. 'Just think positive': We can all work to address the publication bias issue. *The Australian and New Zealand journal of psychiatry*. 2017;51(5):536.

Berlin JA. Will publication bias vanish in the age of online journals? *The Online journal of current clinical trials*. 1992;Doc No 12:[1337 words; 10 paragraphs].

Bernal-Delgado E, Fisher ES. Abstracts in high profile journals often fail to report harm. *BMC Medical Research Methodology*. 8. Article Number: 14. 2008.

Bernard H, Werber D, Hohle M. Estimating the under-reporting of norovirus illness in Germany utilizing enhanced awareness of diarrhoea during a large outbreak of Shiga toxin-producing *E. coli* O104:H4 in 2011--a time series analysis. *BMC infectious diseases*. 2014;14:116.

Bernillon P, Lievre L, Pillonel J, Laporte A, Costagliola D. Record-linkage between two anonymous databases for a capture-recapture estimation of underreporting of AIDS cases: France 1990-1993. *The Clinical Epidemiology Group from Centres d'Information et de Soins de l'Immunodeficiency Humaine. International journal of epidemiology*. 2000;29(1):168-74.

Bero LA, Glantz SA, Rennie D. Publication bias and public health policy on environmental tobacco smoke. *Jama*. 1994;272(2):133-6.

- Berta Vanrullen I, Volatier J-L, Bertaut A, Dufour A, Dallongeville J. Characteristics of energy intake under-reporting in French adults. *The British journal of nutrition*. 2014;111(7):1292-302.
- Berwanger O, Ribeiro RA, Finkelsztejn A, Watanabe M, Suzumura EA, Duncan BB, et al. The quality of reporting of trial abstracts is suboptimal: survey of major general medical journals. *Journal of clinical epidemiology*. 2009;62(4):387-92.
- Bes-Rastrollo M, Martinez-Gonzalez MA. Differential underreporting and other caveats about sugar-sweetened beverages and weight gain. *The American journal of clinical nutrition*. 2008;88(5):1450-1; author reply 1-2.
- Bes-Rastrollo M, Schulze MB, Ruiz-Canela M, Martinez-Gonzalez MA. Financial conflicts of interest and reporting bias regarding the association between sugar-sweetened beverages and weight gain: a systematic review of systematic reviews. *PLoS medicine*. 2013;10(12):e1001578; discussion e.
- Bessa Ferreira VM, Portela MC. Evaluation of under-reporting of AIDS cases in the city of Rio de Janeiro based on data from the hospital information system of the Unified Health System. *Cadernos de saude publica*. 1999;15(2):317-24.
- Bessa MA, Mitsuhiro SS, Chalem E, Barros MM, Guinsburg R, Laranjeira R. Underreporting of use of cocaine and marijuana during the third trimester of gestation among pregnant adolescents. *Addictive behaviors*. 2010;35(3):266-9.
- Betz ME, Kelly SP, Fisher J. Death certificate inaccuracy and underreporting of injury in elderly people. *Journal of the American Geriatrics Society*. 2008;56(12):2267-72.
- Bezdjian A, Klis SFL, Peters JPM, Grolman W, Stegeman I. Quality of reporting of otorhinolaryngology articles using animal models with the ARRIVE statement. *Laboratory animals*. 2018;52(1):79-87.
- Bhakta P. Faulty Study Design Produces an Outcome That May Confuse Medical Fraternity: A Serious Publication Bias. *Anesthesia and analgesia*. 2017;124(4):1377-8.
- Bhamidipati D, Anand S, Gothwal A, Raghav K, Overman MJ. On the underreporting of health-related quality of life and regulatory approval. *Annals of*

oncology : official journal of the European Society for Medical Oncology. 2019;30(4):657-8.

Bhandari M, Richards RR, Sprague S, Schemitsch EH. The quality of reporting of randomized trials in the Journal of Bone and Joint Surgery from 1988 through 2000. The Journal of bone and joint surgery American volume. 2002;84(3):388-96.

Bhattacharya A, Rao BB, Koutroubakis IE, Click B, Vargas EJ, Regueiro M, et al. Silent Crohn's Disease Predicts Increased Bowel Damage During Multiyear Follow-up: The Consequences of Under-reporting Active Inflammation. Inflammatory bowel diseases. 2016;22(11):2665-71.

Biagi C, Montanaro N, Buccellato E, Roberto G, Vaccheri A, Motola D. Underreporting in pharmacovigilance: an intervention for Italian GPs (Emilia-Romagna region). European journal of clinical pharmacology. 2013;69(2):237-44.

Bialystok E, Kroll JF, Green DW, MacWhinney B, Craik FIM. Publication Bias and the Validity of Evidence: What's the Connection? Psychological science. 2015;26(6):944-6.

Binda F, Fougnot S, De Monchy P, Fagot-Campagna A, Pulcini C, Thilly N, et al. Impact of selective reporting of antibiotic susceptibility test results in urinary tract infections in the outpatient setting: a protocol for a pragmatic, prospective quasi-experimental trial. BMJ open. 2019;8(11):e025810.

Bintliff SJ, Hernandez DB. Under-reporting of birth defects in Hawaii: a pilot study. Hawaii medical journal. 1978;37(6):173-5.

Biondi-Zoccai GGL, Lotrionte M, Abbate A, Testa L, Remigi E, Burzotta F, et al. Compliance with QUOROM and quality of reporting of overlapping meta-analyses on the role of acetylcysteine in the prevention of contrast associated nephropathy: case study. BMJ (Clinical research ed). 2006;332(7535):202-9.

Biscone ES, Cranmer J, Lewitt M, Martyn KK. Are CNM-Attended Births in Texas Hospitals Underreported? Journal of midwifery & women's health. 2017.

Black AE, Cole TJ. Biased over- or under-reporting is characteristic of individuals whether over time or by different assessment methods. Journal of the American Dietetic Association. 2001;101(1):70-80.

Black Thomas LM. Underreporting of Bloodborne Pathogen Exposures in Nursing Students. Nurse educator. 2019.

Blackwell SC, Thompson L, Refuerzo J. Full publication of clinical trials presented at a national maternal-fetal medicine meeting: is there a publication bias? American journal of perinatology. 2009;26(9):679-82.

Blanc PD, Kearney TE, Olson KR. Underreporting of fatal cases to a regional poison control center. The Western journal of medicine. 1995;162(6):505-9.

Blechert J, Liedlgruber M, Lender A, Reichenberger J, Wilhelm FH. Unobtrusive electromyography-based eating detection in daily life: A new tool to address underreporting? Appetite. 2017;118:168-73.

Blitz JD, Shoham MH, Fang Y, Narine V, Mehta N, Sharma BS, et al. Preoperative Renal Insufficiency: Underreporting and Association With Readmission and Major Postoperative Morbidity in an Academic Medical Center. Anesthesia and analgesia. 2016;123(6):1500-15.

Blitzer ML, Marieb MA, Schoenfeld MH. Inability to communicate with ICDs: an underreported failure mode. Pacing and clinical electrophysiology : PACE. 2001;24(1):13-5.

Blunden S, Lushington K, Lorenzen B, Wong J, Balendran R, Kennedy D. Symptoms of sleep breathing disorders in children are underreported by parents at general practice visits. Sleep & breathing = Schlaf & Atmung. 2003;7(4):167-76.

Boef AGC, Dekkers OM, le Cessie S. Mendelian randomization studies: a review of the approaches used and the quality of reporting. International journal of epidemiology. 2015;44(2):496-511.

Bohdanowicz M, Wilczynski N, Haynes RB. Response to Carter et al.: A survey identified publication bias in the secondary literature. Journal of clinical epidemiology. 2006;59(11):1228.

Bohning D. Meta-analysis: a unifying meta-likelihood approach framing unobserved heterogeneity, study covariates, publication bias, and study quality. Methods of information in medicine. 2005;44(1):127-35.

Boissel JP, Haugh MC. The iceberg phenomenon and publication bias: the editors' fault? *Clinical trials and meta-analysis*. 1993;28(6):309-15.

Bolignano D, Mattace-Raso F, Torino C, D'Arrigo G, Abd ElHafeez S, Elhafeez SA, et al. The quality of reporting in clinical research: the CONSORT and STROBE initiatives. *Aging clinical and experimental research*. 2013;25(1):9-15.

Bom PRD, Rachinger H. A Kinked Meta-Regression Model for Publication Bias Correction. *Research synthesis methods*. 2019.

Bonde JPE. Work-related cancer still underreported. *Ugeskrift for laeger*. 2007;169(18):1657.

Bone C, Gelberg L, Vahidi M, Leake B, Yacenda-Murphy J, Andersen RM. Under-reporting of Risky Drug Use Among Primary Care Patients in Federally Qualified Health Centers. *Journal of addiction medicine*. 2016;10(6):387-94.

Boniface S, Kneale J, Shelton N. Drinking pattern is more strongly associated with under-reporting of alcohol consumption than socio-demographic factors: evidence from a mixed-methods study. *BMC public health*. 2014;14:1297.

Boniface S, Shelton N. How is alcohol consumption affected if we account for under-reporting? A hypothetical scenario. *European journal of public health*. 2013;23(6):1076-81.

Bonnett LJ, Ken-Dror G, Davies GR. Quality of reporting of outcomes in phase III studies of pulmonary tuberculosis: a systematic review. *Trials*. 2018;19(1):134.

Boonwaat L, Fletcher-Lartey S, Conaty S. Underreporting of influenza outbreaks in aged care facilities in South Western Sydney, Australia, 2014. *Western Pacific surveillance and response journal : WPSAR*. 2016;7(1):32-4.

Borg Debono V, Zhang S, Ye C, Paul J, Arya A, Hurlburt L, et al. The quality of reporting of RCTs used within a postoperative pain management meta-analysis, using the CONSORT statement. *BMC anesthesiology*. 2012;12:13.

Borg Debono V, Zhang S, Ye C, Paul J, Arya A, Hurlburt L, et al. A look at the potential association between PICOT framing of a research question and the quality of reporting of analgesia RCTs. *BMC anesthesiology*. 2013;13(1):44.

Borm GF, den Heijer M, Zielhuis GA. Publication bias was not a good reason to discourage trials with low power. *Journal of clinical epidemiology*. 2009;62(1):47.e1-10.

Borm GF, Donders ART. Updating meta-analyses leads to larger type I errors than publication bias. *Journal of clinical epidemiology*. 2009;62(8):825-30.e10.

Bossuyt PMM. The quality of reporting in diagnostic test research: getting better, still not optimal. *Clinical chemistry*. 2004;50(3):465-6.

Bothwell EKG, Ayala GX, Conway TL, Rock CL, Gallo LC, Elder JP. Underreporting of food intake among Mexican/Mexican-American Women: rates and correlates. *Journal of the American Dietetic Association*. 2009;109(4):624-32.

Boulesteix A-L, Stierle V, Hapfelmeier A. Publication Bias in Methodological Computational Research. *Cancer informatics*. 2015;14(Suppl 5):11-9.

Bourdellon L, Thilly N, Fougnot S, Pulcini C, Henard S. Impact of selective reporting of antibiotic susceptibility test results on the appropriateness of antibiotics chosen by French general practitioners in urinary tract infections: a randomised controlled case-vignette study. *International journal of antimicrobial agents*. 2017;50(2):258-62.

Bouvier-Colle MH, Varnoux N, Costes P, Hatton F. Reasons for the underreporting of maternal mortality in France, as indicated by a survey of all deaths among women of childbearing age. *International journal of epidemiology*. 1991;20(3):717-21.

Bowden J, Thompson JR, Burton P. Using pseudo-data to correct for publication bias in meta-analysis. *Statistics in medicine*. 2006;25(22):3798-813.

Bowling CB, Zhang R, Franch H, Huang Y, Mirk A, McClellan WM, et al. Underreporting of nursing home utilization on the CMS-2728 in older incident dialysis patients and implications for assessing mortality risk. *BMC nephrology*. 2015;16:32.

Braam LA, Ocke MC, Bueno-de-Mesquita HB, Seidell JC. Determinants of obesity-related underreporting of energy intake. *American journal of epidemiology*. 1998;147(11):1081-6.

Brabazon ED, O'Farrell A, Murray CA, Carton MW, Finnegan P. Under-reporting of notifiable infectious disease hospitalizations in a health board region in Ireland: room for improvement? *Epidemiology and infection*. 2008;136(2):241-7.

Brabazon ED, Sheridan A, Finnegan P, Carton MW, Bedford D. Under-reporting of notifiable infectious disease hospitalizations: significant improvements in the Irish context. *Epidemiology and infection*. 2015;143(6):1166-74.

Brace S, Taylor D, O'Connor AM. The quality of reporting and publication status of vaccines trials presented at veterinary conferences from 1988 to 2003. *Vaccine*. 2010;28(32):5306-14.

Braga LH, McGrath M, Easterbrook B, Jegatheeswaran K, Mauro L, Lorenzo AJ. Quality of reporting for randomized controlled trials in the hypospadias literature: Where do we stand? *Journal of pediatric urology*. 2017;13(5):482.e1-.e9.

Breetvelt IS, Van Dam FS. Underreporting by cancer patients: the case of response-shift. *Social science & medicine (1982)*. 1991;32(9):981-7.

Breivik H, Rosseland LA, Stubhaug A. Statistical pearls: Importance of effect-size, blinding, randomization, publication bias, and the overestimated p-values. *Scandinavian journal of pain*. 2013;4(4):217-9.

Breva LP, Domingo JD, Martinez Beneito MA, Barbera JP. Vaccine coverage estimation using a computerized vaccination registry with potential underreporting and a seroprevalence study. *Vaccine*. 2015;33(18):2183-8.

Brice A, Chalmers I. Medical journal editors and publication bias. *BMJ (Clinical research ed)*. 2013;347:f6170.

Briefel RR, Sempos CT, McDowell MA, Chien S, Alaimo K. Dietary methods research in the third National Health and Nutrition Examination Survey: underreporting of energy intake. *The American journal of clinical nutrition*. 1997;65(4 Suppl):1203S-9S.

Briel M, Muller KF, Meerpohl JJ, von Elm E, Lang B, Motschall E, et al. Publication bias in animal research: a systematic review protocol. *Systematic reviews*. 2013;2:23.

- Briesacher BA, Mui B, Devlin JW, Koethe B. Nursing homes underreport antipsychotic prescribing. *Aging & mental health*. 2019;1-5.
- Briggs JP. The Quality of Reporting of Kidney Research: A Challenge to JASN. *Journal of the American Society of Nephrology : JASN*. 2019;30(1):1-2.
- Brlik V, Koleček J, Burgess M, Hahn S, Humple D, Krist M, et al. Weak effects of geolocators on small birds: A meta-analysis controlled for phylogeny and publication bias. *The Journal of animal ecology*. 2019.
- Brodowy BA, Guglielmo BJ, York MK, Herfindal ET, Brooks GF. Experience with selective reporting of susceptibility to antimicrobial agents. *American journal of hospital pharmacy*. 1989;46(9):1816-8.
- Brookoff D, Campbell EA, Shaw LM. The underreporting of cocaine-related trauma: drug abuse warning network reports vs hospital toxicology tests. *American journal of public health*. 1993;83(3):369-71.
- Brown TA, Sellbom M. The Utility of the MMPI-2-RF Validity Scales in Detecting Underreporting. *Journal of personality assessment*. 2019;1-9.
- Brugha T, Walsh D. Suicide past and present--the temporal constancy of under-reporting. *The British journal of psychiatry : the journal of mental science*. 1978;132:177-9.
- Brum L, Kupek E. Record linkage and capture-recapture estimates for underreporting of human leptospirosis in a Brazilian health district. *The Brazilian journal of infectious diseases : an official publication of the Brazilian Society of Infectious Diseases*. 2005;9(6):515-20.
- Bryant J, Passey ME, Hall AE, Sanson-Fisher RW. A systematic review of the quality of reporting in published smoking cessation trials for pregnant women: an explanation for the evidence-practice gap? *Implementation science : IS*. 2014;9:94.
- Buffon RB, Lisboa AP, Carvalho F, Muller KR, Bonamigo RR. Vulvovaginal-gingival lichen planus--a rare or underreported syndrome? *International journal of dermatology*. 2009;48(3):322-4.

Buiatti E, Acciai S, Ragni P, Tortoli E, Barbieri A, Cravedi B, et al. The quantification of tuberculous disease in an Italian area and the estimation of underreporting by means of record linkage. *Epidemiologia e prevenzione*. 1998;22(4):237-41.

Burdett S, Stewart LA, Tierney JF. Publication bias and meta-analyses: a practical example. *International journal of technology assessment in health care*. 2003;19(1):129-34.

Burkner P-C, Doebler P. Testing for publication bias in diagnostic meta-analysis: a simulation study. *Statistics in medicine*. 2014;33(18):3061-77.

Burns KEA, Adhikari NKJ, Kho M, Meade MO, Patel RV, Sinuff T, et al. Abstract reporting in randomized clinical trials of acute lung injury: an audit and assessment of a quality of reporting score. *Critical care medicine*. 2005;33(9):1937-45.

Burris JF. Publication bias. *Clinical pharmacology and therapeutics*. 1993;53(4):495.

Burstein JL, Henry MC, Alicandro JM, McFadden K, Thode HC, Jr., Hollander JE. Evidence for and impact of selective reporting of trauma triage mechanism criteria. *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*. 1996;3(11):1011-5.

Button KS, Bal L, Clark A, Shipley T. Preventing the ends from justifying the means: withholding results to address publication bias in peer-review. *BMC psychology*. 2016;4(1):59.

Byrnes G, Gurrin L, Dowty J, Hopper JL. Publication policy or publication bias? *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*. 2005;14(6):1363.

Caccialanza R, Cameletti B, Cavallaro G. Nutritional Intake of Young Italian High-Level Soccer Players: Under-Reporting is the Essential Outcome. *Journal of sports science & medicine*. 2007;6(4):538-42.

Cairo F, Sanz I, Matesanz P, Nieri M, Pagliaro U. Quality of reporting of randomized clinical trials in implant dentistry. A systematic review on critical

aspects in design, outcome assessment and clinical relevance. *Journal of clinical periodontology*. 2012;39 Suppl 12:81-107.

Cakar E, Dincer U, Kiralp MZ, Dursun H, Tekin L, Ozcakar L. An underreported complication of ankylosing spondylitis: scoliosis. *Acta reumatologica portuguesa*. 2009;34(1):139-40.

Calabro RS, Magaudda A, Nibali VC, Bramanti P. Sexual dysfunction induced by lacosamide: An underreported side effect? *Epilepsy & behavior : E&B*. 2015;46:252-3.

Calabro RS. Gabapentin and sexual dysfunction: an overlooked and underreported problem? *Epilepsy & behavior : E&B*. 2011;22(4):818.

Callaham M, Wears RL, Weber E. Journal prestige, publication bias, and other characteristics associated with citation of published studies in peer-reviewed journals. *Jama*. 2002;287(21):2847-50.

Calnan M, Smith GD, Sterne JAC. The publication process itself was the major cause of publication bias in genetic epidemiology. *Journal of clinical epidemiology*. 2006;59(12):1312-8.

Calzavara LM, Coates RA, Craib KJ, Schechter MT, Le TN, Nault PL, et al. Underreporting of AIDS cases in Canada: a record linkage study. *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*. 1990;142(1):36-9.

Campana LG, Clover AJP, Valpione S, Quaglino P, Gehl J, Kunte C, et al. Recommendations for improving the quality of reporting clinical electrochemotherapy studies based on qualitative systematic review. *Radiology and oncology*. 2016;50(1):1-13.

Campbell H, Gustafson P. Conditional equivalence testing: An alternative remedy for publication bias. *PloS one*. 2018;13(4):e0195145.

Canning DA. Re: Quality of Reporting for Randomized Controlled Trials in the Hypospadias Literature: Where do we Stand? *The Journal of urology*. 2018;200(3):485.

Caputo V, Santi F, Cascio A, Trizzino M, Colomba C. Trombiculiasis: an underreported ectoparasitosis in Sicily. *Le infezioni in medicina : rivista periodica di eziologia, epidemiologia, diagnostica, clinica e terapia delle patologie infettive*. 2018;26(1):77-80.

Caram-Deelder C, Kreuger AL, Rosendaal FR, van der Bom JG, Middelburg RA. Continuing use of the terms prospective and retrospective and quality of reporting of observational studies: time to update the STROBE guideline? *International journal of epidemiology*. 2016;45(2):587-9.

Carbine KA, Larson MJ. Quantifying the presence of evidential value and selective reporting in food-related inhibitory control training: a p-curve analysis. *Health psychology review*. 2019:1-63.

Cardoso ARP, Araujo MAL, Andrade RFV, Saraceni V, Miranda AE, Dourado MIC. Underreporting of Congenital Syphilis as a Cause of Fetal and Infant Deaths in Northeastern Brazil. *PloS one*. 2016;11(12):e0167255.

Caroe TK, Ebbelohj NE, Wulf HC, Agner T. Occupational skin cancer may be underreported. *Danish medical journal*. 2013;60(5):A4624.

Carrasco M, Volkmar FR, Bloch MH. Pharmacologic treatment of repetitive behaviors in autism spectrum disorders: evidence of publication bias. *Pediatrics*. 2012;129(5):e1301-10.

Carroll HA, Toumpakari Z, Johnson L, Betts JA. The perceived feasibility of methods to reduce publication bias. *PloS one*. 2017;12(10):e0186472.

Carter AO, Carter TP, Griffin GH. Author's response: a survey identified publication bias in the secondary literature. *Journal of clinical epidemiology*. 2007;60(4):425.

Carter AO, Griffin GH, Carter TP. A survey identified publication bias in the secondary literature. *Journal of clinical epidemiology*. 2006;59(3):241-5.

Carter LM, Whiting SJ. Underreporting of energy intake, socioeconomic status, and expression of nutrient intake. *Nutrition reviews*. 1998;56(6):179-82.

Carvalho CN, Dourado I, Bierrenbach AL. Underreporting of the tuberculosis and AIDS comorbidity: an application of the linkage method. *Revista de saude publica.* 2011;45(3):548-55.

Cassey P, Ewen JG, Blackburn TM, Moller AP. A survey of publication bias within evolutionary ecology. *Proceedings Biological sciences.* 2004;271 Suppl 6:S451-4.

Castle IJP, Yi H-Y, Hingson RW, White AM. State variation in underreporting of alcohol involvement on death certificates: motor vehicle traffic crash fatalities as an example. *Journal of studies on alcohol and drugs.* 2014;75(2):299-312.

Cates C. Lung cancer and passive smoking. Scales for visual test of publication bias are unfair. *BMJ (Clinical research ed).* 2000;321(7270):1222-3.

Cato D, Mulhall BP. Needlestick injuries in health care workers: continuing risk and under-reporting. *The Medical journal of Australia.* 1994;161(4):285.

Caulkins JP. Publication bias: a concern just for drug prevention or for the entire drug control literature? *Drug and alcohol review.* 2008;27(4):345-6; discussion 52-6.

Cavadas V, Branco F, Carvalho FL, Osorio L, Gomes MJ, Silva-Ramos M. The quality of reporting of randomized controlled trials in pelvic organ prolapse. *International urogynecology journal.* 2011;22(9):1117-25.

Cavalini LT, Ponce de Leon ACM. Correction approach for underreporting of deaths and hospital admissions due to ill-defined causes. *Revista de saude publica.* 2007;41(1):85-93.

Cena H, Oggioni C, Turpini C, Negri F, Roggi C, Allegri C. Underreporting in obese inpatients undergoing a psycho-nutritional rehabilitative program. *Eating and weight disorders : EWD.* 2013;18(2):199-207.

Centers for Disease C. Underreporting of alcohol-related mortality on death certificates of young U.S. Army veterans. *MMWR Morbidity and mortality weekly report.* 1987;36(27):437-40.

Centers for Disease Control and P. Notes from the field: investigation of leptospirosis underreporting - Puerto Rico, 2010. *MMWR Morbidity and mortality weekly report*. 2012;61(22):421.

Chaby G, Lebrun-Vignes B, Haddad C, Hemery F, Ingen-Housz-Oro S, de Prost N, et al. Drug-induced Stevens-Johnson syndrome and toxic epidermal necrolysis: Proportion and determinants of underreporting to pharmacovigilance. *The journal of allergy and clinical immunology In practice*. 2019;7(4):1344-6.

Chaikof EL. Hear no evil, see no evil, speak no evil: postmarket monitoring, underreporting, and estimating the prevalence of endograft-related adverse events. *Journal of vascular surgery*. 2002;35(6):1299-300.

Chalmers I, Dickersin K. Biased under-reporting of research reflects biased under-submission more than biased editorial rejection. *F1000Research*. 2013;2:1.

Chalmers I. Biased underreporting of research is unethical and should be outlawed. *Zeitschrift fur arztliche Fortbildung und Qualitätssicherung*. 2006;100(7):531-5.

Chalmers I. Government regulation is needed to prevent biased under-reporting of clinical trials. *BMJ (Clinical research ed)*. 2004;329(7463):462.

Chalmers I. Publication bias. *Lancet (London, England)*. 1993;342(8879):1116.

Chalmers I. Underreporting research is scientific misconduct. *Jama*. 1990;263(10):1405-8.

Chalmers J, Lancaster K, Hughes C. The stigmatisation of 'ice' and under-reporting of meth/amphetamine use in general population surveys: A case study from Australia. *The International journal on drug policy*. 2016;36:15-24.

Chalmers TC, Frank CS, Reitman D. Minimizing the three stages of publication bias. *Jama*. 1990;263(10):1392-5.

Chalmers TC. Minimizing bias in publication of clinical trials. *Medicina clinica*. 1992;98(8):305-7.

Chambers LW, Spitzer WO, Hill GB, Helliwell BE. Underreporting of cancer in medical surveys: a source of systematic error in cancer research. *American journal of epidemiology*. 1976;104(2):141-5.

Champagne CM, Baker NB, DeLany JP, Harsha DW, Bray GA. Assessment of energy intake underreporting by doubly labeled water and observations on reported nutrient intakes in children. *Journal of the American Dietetic Association*. 1998;98(4):426-33.

Champagne CM, Delany JP, Harsha DW, Bray GA. Underreporting of energy intake in biracial children is verified by doubly labeled water. *Journal of the American Dietetic Association*. 1996;96(7):707-9.

Chan A-W, Altman DG. Identifying outcome reporting bias in randomised trials on PubMed: review of publications and survey of authors. *BMJ (Clinical research ed)*. 2005;330(7494):753.

Chan A-W, Hrobjartsson A, Haahr MT, Gotzsche PC, Altman DG. Empirical evidence for selective reporting of outcomes in randomized trials: comparison of protocols to published articles. *Jama*. 2004;291(20):2457-65.

Chan A-W, Krleza-Jeric K, Schmid I, Altman DG. Outcome reporting bias in randomized trials funded by the Canadian Institutes of Health Research. *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*. 2004;171(7):735-40.

Chan CL, Leyrat C, Eldridge SM. Quality of reporting of pilot and feasibility cluster randomised trials: a systematic review. *BMJ open*. 2017;7(11):e016970.

Chan S, Bhandari M. The quality of reporting of orthopaedic randomized trials with use of a checklist for nonpharmacological therapies. *The Journal of bone and joint surgery American volume*. 2007;89(9):1970-8.

Chang L, Dhruva SS, Chu J, Bero LA, Redberg RF. Selective reporting in trials of high risk cardiovascular devices: cross sectional comparison between premarket approval summaries and published reports. *BMJ (Clinical research ed)*. 2015;350:h2613.

Chaparro P, Soto E, Padilla J, Vargas D. Estimation of the underreporting of malaria measurement in ten municipalities of the Pacific coast of Narino during 2009. *Biomedica : revista del Instituto Nacional de Salud*. 2012;32 Suppl 1:29-37.

Charles A, Ranson D, Bohensky M, Ibrahim JE. Under-reporting of deaths to the coroner by doctors: a retrospective review of deaths in two hospitals in Melbourne, Australia. *International journal for quality in health care : journal of the International Society for Quality in Health Care*. 2007;19(4):232-6.

Charlesworth M, Elliott MW, Holmes JD. Noninvasive positive pressure ventilation for acute respiratory failure in delirious patients: understudied, underreported, or underappreciated? A systematic review and meta-analysis. *Lung*. 2012;190(6):597-603.

Chathra N, Bhat RM. Corns in scleroderma: An underreported entity. *Indian dermatology online journal*. 2017;8(1):49-50.

Chen B, Liu J, Zhang C, Li M. A retrospective survey of quality of reporting on randomized controlled trials of metformin for polycystic ovary syndrome. *Trials*. 2014;15:128.

Chen S, Joodi G, Devinsky O, Sadaf MI, Pursell IW, Simpson RJ, Jr. Under-reporting of sudden unexpected death in epilepsy. *Epileptic disorders : international epilepsy journal with videotape*. 2018;20(4):270-8.

Chen W, Yu J, Zhang L, Su G, Wang W, Kwong J, et al. Quality of reporting in randomized controlled trials of therapeutic cardiovascular medical devices. *Surgery*. 2019;165(5):965-9.

Chen WJ, Fang C-C, Shyu R-S, Lin K-C. Underreporting of illicit drug use by patients at emergency departments as revealed by two-tiered urinalysis. *Addictive behaviors*. 2006;31(12):2304-8.

Chen Y, Li J, Ai C, Duan Y, Wang L, Zhang M, et al. Assessment of the quality of reporting in abstracts of randomized controlled trials published in five leading Chinese medical journals. *PloS one*. 2010;5(8):e11926.

Chen Y, Rennie DC, Lockinger LA, Dosman JA. Association between obesity and high blood pressure: reporting bias related to gender and age. *International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity*. 1998;22(8):771-7.

Cheng L. Complications after obliteration of the superior petrosal vein: Are they rare or just underreported? *Journal of clinical neuroscience : official journal of the Neurosurgical Society of Australasia*. 2016;31:1-3.

Cherpak LA, Korevaar DA, McGrath TA, Dang W, Walker D, Salameh J-P, et al. Publication Bias: Association of Diagnostic Accuracy in Radiology Conference Abstracts with Full-Text Publication. *Radiology*. 2019:182206.

Chiu H, Hollingworth S, Van Driel M, Magin P, Benham H. Under-reporting of socio-economic status in randomized control trials of biologic disease-modifying anti-rheumatic drugs in rheumatoid arthritis. *Rheumatology (Oxford, England)*. 2017;56(4):660-1.

Choi AH, Hamner JB, Merchant SJ, Trisal V, Chow W, Garberoglio CA, et al. Underreporting of Gastrointestinal Stromal Tumors: Is the True Incidence Being Captured? *Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract*. 2015;19(9):1699-703.

Choi SW, Lam DMH. Funnels for publication bias--have we lost the plot? *Anaesthesia*. 2016;71(3):338-41.

Chong SW, Collins NF, Wu CY, Liskaser GM, Peyton PJ. The relationship between study findings and publication outcome in anesthesia research: a retrospective observational study examining publication bias. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. 2016;63(6):682-90.

Choudhury BK, Saikia UK, Sarma D, Saikia M, Choudhury SD, Bhuyan D. Diabetic myonecrosis: An underreported complication of diabetes mellitus. *Indian journal of endocrinology and metabolism*. 2011;15(Suppl 1):S58-61.

Chouhan JD, Zhao HH, Magee B, McNeil BK. Retroperitoneal hemorrhage after ureteroscopy without laser lithotripsy: an extreme example of an underreported event? *The Canadian journal of urology*. 2016;23(3):8324-8.

Chow CB. Underreported, underacknowledged: child abuse can no longer be ignored. *Hong Kong medical journal = Xianggang yi xue za zhi*. 2005;11(6):429-30.

Chow JC. Prevalence of Publication Bias Tests in Speech, Language, and Hearing Research. *Journal of speech, language, and hearing research : JSLHR*. 2018;61(12):3055-63.

Chow WH, Devesa SS. Underreporting and misclassification of urinary tract cancer cases on death certificates. *Epidemiology (Cambridge, Mass)*. 1996;7(5):517-20.

Christensen E. Quality of reporting of meta-analyses: the QUOROM statement. Will it help? *Journal of hepatology*. 2001;34(2):342-5.

Chuard PJC, Vrtilek M, Head ML, Jennions MD. Evidence that nonsignificant results are sometimes preferred: Reverse P-hacking or selective reporting? *PLoS biology*. 2019;17(1):e3000127.

Cidon EU. Sexual problems after breast cancer: the underreported symptoms. *Gynecologic oncology*. 2010;116(1):147.

Ciofi degli Atti ML, Rota MC, Mandolini D, Bella A, Gabutti G, Crovari P, et al. Assessment of varicella underreporting in Italy. *Epidemiology and infection*. 2002;128(3):479-84.

Cirera Suarez L, Martinez Lopez C, Salmeron Martinez D, Navarro Sanchez C. Perinatal mortality underreporting in obstetrics and neonatology. *Anales de pediatria (Barcelona, Spain : 2003)*. 2008;69(2):129-33.

Civitello DJ, Cohen J, Fatima H, Halstead NT, McMahon TA, Ortega CN, et al. Reply to Salkeld et al.: Diversity-disease patterns are robust to study design, selection criteria, and publication bias. *Proceedings of the National Academy of Sciences of the United States of America*. 2015;112(46):E6262.

Clarke CS, Rogers ET, Egan EL. Babesiosis: under-reporting or case-clustering? *Postgraduate medical journal*. 1989;65(766):591-3.

Clarke R, Bennett DA, Parish S, Verhoef P, Dotsch-Klerk M, Lathrop M, et al. Homocysteine and coronary heart disease: meta-analysis of MTHFR case-control studies, avoiding publication bias. *PLoS medicine*. 2012;9(2):e1001177.

Clavien PA, Puhan MA. Biased reporting in surgery. *The British journal of surgery*. 2014;101(6):591-2.

Clegg A, Westby M, Young JB. Under-reporting of delirium in the NHS. *Age and ageing*. 2011;40(2):283-6.

Cleland JGF. Systematic reporting bias in meta-analyses of trials of aspirin for the primary prevention of cardiovascular disease. *The American journal of medicine*. 2012;125(2):e13.

Cleophas RC, Cleophas TJ. Is selective reporting of clinical research unethical as well as unscientific? *International journal of clinical pharmacology and therapeutics*. 1999;37(1):1-7.

Cleophas TJ. Is selective reporting of well-designed clinical research unethical as well as unscientific? *Nederlands tijdschrift voor geneeskunde*. 1996;140(9):509-10.

Clinet M-L, Vaysse B, Gignon M, Jarde O, Manaouil C. Violence undergone by the general practitioners: Under-reporting of the attacks or of the infringements to their properties. *Presse medicale (Paris, France : 1983)*. 2015;44(11):e321-9.

Cloud JL, Bauman SK, Pelfrey JM, Ashwood ER. Biased report on the IMMY ALPHA Histoplasma antigen enzyme immunoassay for diagnosis of histoplasmosis. *Clinical and vaccine immunology : CVI*. 2007;14(10):1389-90; author reply 90-1.

Coburn KM, Vevea JL. Publication bias as a function of study characteristics. *Psychological methods*. 2015;20(3):310-30.

Cockburn M, Swetter SM, Peng D, Keegan THM, Deapen D, Clarke CA. Melanoma underreporting: why does it happen, how big is the problem, and how do we fix it? *Journal of the American Academy of Dermatology*. 2008;59(6):1081-5.

Cohen J. A new 'publication bias': the mode of publication. *Reproductive biomedicine online*. 2006;13(5):754-5.

Colleti J, Jr., de Carvalho WB. PICU-Acquired Weakness: Underestimated and Underreported. *Pediatric critical care medicine : a journal of the Society of Critical*

Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies. 2016;17(4):381.

Collins M, Gidal BE, Garnett WR, Reinfeldt G, Tusch GM. Potential underreporting of intravenous phenytoin adverse events. *The Annals of pharmacotherapy*. 1999;33(1):111-2.

Confortini M, Ciatto S, Bonardi L, Bulgaresi P, Cariaggi MP, Carozzi F, et al. Analysis of false-negative and underreported smears in the Florence district screening program for cervical carcinoma. *Tumori*. 1997;83(6):880-3.

Connolly JF, Cullen A. Under-reporting of suicide in an Irish county. *Crisis*. 1995;16(1):34-8.

Conradi U, Joffe AR. Publication bias in animal research presented at the 2008 Society of Critical Care Medicine Conference. *BMC research notes*. 2017;10(1):262.

Constans JJ, Kimbrell TA, Nanney JT, Marx BP, Jegley S, Pyne JM. Over-reporting bias and the modified Stroop effect in Operation Enduring and Iraqi Freedom veterans with and without PTSD. *Journal of abnormal psychology*. 2014;123(1):81-90.

Convit A, Isay D, Gadioma R, Volavka J. Underreporting of physical assaults in schizophrenic inpatients. *The Journal of nervous and mental disease*. 1988;176(8):507-9.

Conway FN, Domingues M, Monaco R, Lesnewich LM, Ray AE, Alderman BL, et al. Concussion Symptom Underreporting Among Incoming National Collegiate Athletic Association Division I College Athletes. *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*. 2018.

Conway GA, Colley-Niemeyer B, Pursley C, Cruz C, Burt S, Rion P, et al. Underreporting of AIDS cases in South Carolina, 1986 and 1987. *Jama*. 1989;262(20):2859-63.

Cook DA, Beckman TJ, Bordage G. Quality of reporting of experimental studies in medical education: a systematic review. *Medical education*. 2007;41(8):737-45.

Cooper AL, Kazis LE, Dore DD, Mor V, Trivedi AN. Underreporting high-risk prescribing among Medicare Advantage plans: a cross-sectional analysis. *Annals of internal medicine*. 2013;159(7):456-62.

Cooper MA, Ibrahim A, Lyu H, Makary MA. Underreporting of robotic surgery complications. *Journal for healthcare quality : official publication of the National Association for Healthcare Quality*. 2015;37(2):133-8.

Cooper PN, Milroy CM. The coroner's system and under-reporting of suicide. *Medicine, science, and the law*. 1995;35(4):319-26.

Copas J, Dwan K, Kirkham J, Williamson P. A model-based correction for outcome reporting bias in meta-analysis. *Biostatistics (Oxford, England)*. 2014;15(2):370-83.

Copas J, Jackson D. A bound for publication bias based on the fraction of unpublished studies. *Biometrics*. 2004;60(1):146-53.

Copas J, Marson A, Williamson P, Kirkham J. Model-based sensitivity analysis for outcome reporting bias in the meta analysis of benefit and harm outcomes. *Statistical methods in medical research*. 2019;28(3):889-903.

Copas JB, Malley PF. A robust P-value for treatment effect in meta-analysis with publication bias. *Statistics in medicine*. 2008;27(21):4267-78.

Copas JB, Shi JQ. A sensitivity analysis for publication bias in systematic reviews. *Statistical methods in medical research*. 2001;10(4):251-65.

Coppell K, McBride K, Williams S. Under-reporting of diabetes on death certificates among a population with diabetes in Otago Province, New Zealand. *The New Zealand medical journal*. 2004;117(1207):U1217.

Coppus SFPJ, van der Veen F, Bossuyt PMM, Mol BWJ. Quality of reporting of test accuracy studies in reproductive medicine: impact of the Standards for Reporting of Diagnostic Accuracy (STARD) initiative. *Fertility and sterility*. 2006;86(5):1321-9.

Cordeiro R, Sakate M, Clemente APG, Diniz CS, Donalisio MR. Underreporting of non-fatal work-related injuries in Brazil. *Revista de saude publica*. 2005;39(2):254-60.

Corriols M, Marin J, Berroteran J, Lozano LM, Lundberg I, Thorn A. The Nicaraguan Pesticide Poisoning Register: constant underreporting. *International journal of health services : planning, administration, evaluation*. 2008;38(4):773-87.

Coupat C, Pradier C, Degand N, Hofliger P, Pulcini C. Selective reporting of antibiotic susceptibility data improves the appropriateness of intended antibiotic prescriptions in urinary tract infections: a case-vignette randomised study. *European journal of clinical microbiology & infectious diseases : official publication of the European Society of Clinical Microbiology*. 2013;32(5):627-36.

Cowley AJ, Skene A, Stainer K, Hampton JR. The effect of lorcinide on arrhythmias and survival in patients with acute myocardial infarction: an example of publication bias. *International journal of cardiology*. 1993;40(2):161-6.

Craig BM, Rollison DE, List AF, Cogle CR. Underreporting of myeloid malignancies by United States cancer registries. *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*. 2012;21(3):474-81.

Crawford JM, Briggs CL, Engeland CG. Publication bias and its implications for evidence-based clinical decision making. *Journal of dental education*. 2010;74(6):593-600.

Crean S, Michels SL, Moschella K, Reynolds MW. Bovine thrombin safety reporting: an example of study design and publication bias. *The Journal of surgical research*. 2010;158(1):77-86.

Cree MW, Lalji M, Jiang B, Carriere KC. Under-reporting of compensable mesothelioma in Alberta. *American journal of industrial medicine*. 2009;52(7):526-33.

Crespin OM, Farjah F, Cuevas C, Armstrong A, Kim BT, Martin AV, et al. Hiatal Herniation After Transhiatal Esophagectomy: an Underreported Complication.

Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract. 2016;20(2):231-6.

Cressey BD, Belum VR, Scheinman P, Silvestri D, McEntee N, Livingston V, et al. Stoma care products represent a common and previously underreported source of peristomal contact dermatitis. Contact dermatitis. 2017;76(1):27-33.

Crichton AH, Marek RJ, Dragon WR, Ben-Porath YS. Utility of the MMPI-2-RF Validity Scales in Detection of Simulated Underreporting: Implications of Incorporating a Manipulation Check. Assessment. 2017;24(7):853-64.

Crowcroft NS, Johnson C, Chen C, Li Y, Marchand-Austin A, Bolotin S, et al. Under-reporting of pertussis in Ontario: A Canadian Immunization Research Network (CIRN) study using capture-recapture. PloS one. 2018;13(5):e0195984.

Crowe A, Linder A, Hameed O, Salih C, Roberson J, Gidley J, et al. The impact of implementation of the Bethesda System for Reporting Thyroid Cytopathology on the quality of reporting, "risk" of malignancy, surgical rate, and rate of frozen sections requested for thyroid lesions. Cancer cytopathology. 2011;119(5):315-21.

Crudu V, Blankenship J, Berger P, Scott T, Skelding K. Complications related to access site after percutaneous coronary interventions: are the adverse events underreported? Catheterization and cardiovascular interventions : official journal of the Society for Cardiac Angiography & Interventions. 2011;77(5):643-7.

Crum RM, Harris EL. Risk of alcoholism and parental history: gender differences and a possible reporting bias. Genetic epidemiology. 1996;13(4):329-41.

Cuijpers P, Smit F, Bohlmeijer E, Hollon SD, Andersson G. Efficacy of cognitive-behavioural therapy and other psychological treatments for adult depression: meta-analytic study of publication bias. The British journal of psychiatry : the journal of mental science. 2010;196(3):173-8.

Cummings KC, Mohle-Boetani JC, Werner SB, Vugia DJ. Population-based trends in pediatric hemolytic uremic syndrome in California, 1994-1999: substantial underreporting and public health implications. American journal of epidemiology. 2002;155(10):941-8.

Cuny E, Hoover TE, Kirk JS. Underreporting of bloodborne exposures in a dental school clinic. *Journal of dental education*. 2011;75(4):544-8.

Currie SL, Stephenson N, Palmer AS, Jones BL, Hawkins G, Alexander CL. Under-reporting giardiasis: time to consider the public health implications. *Epidemiology and infection*. 2017;145(14):3007-11.

Currie SL, Stephenson N, Palmer AS, Jones BL, Hawkins G, Alexander CL. Under-reporting giardiasis; Time to consider the public health implications - ERRATUM. *Epidemiology and infection*. 2018;146(3):408.

Cusimano MD, Topolovec-Vranic J, Zhang S, Mullen SJ, Wong M, Ilie G. Factors Influencing the Underreporting of Concussion in Sports: A Qualitative Study of Minor Hockey Participants. *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*. 2017;27(4):375-80.

Daitch V, Babich T, Singer P, Leibovici L. Quality of Reporting Nutritional Randomized Controlled Trials in Patients With Cystic Fibrosis. *Journal of pediatric gastroenterology and nutrition*. 2016;63(2):265-9.

Dal-Re R, Caplan AL. Journal editors impasse with outcome reporting bias. *European journal of clinical investigation*. 2015;45(9):895-8.

Dalton JE, Bolen SD, Mascha EJ. Publication Bias: The Elephant in the Review. *Anesthesia and analgesia*. 2016;123(4):812-3.

Damjanovic V, Damjanovic CM, Taylor N, van Saene HKF. Comment on reply of Miranda et al., Re: 'is the endogenous pathogenesis of Candida parapsilosis infection underreported?'. *The Journal of hospital infection*. 2010;74(2):187-8; author reply 8-9.

Damjanovic V, Damjanovic CM, Taylor N, van Saene HKF. Is the endogenous pathogenesis of Candida parapsilosis infection underreported? *The Journal of hospital infection*. 2009;73(1):93-4.

Dandona R, Kumar GA, Ameer MA, Reddy GB, Dandona L. Under-reporting of road traffic injuries to the police: results from two data sources in urban India. *Injury prevention : journal of the International Society for Child and Adolescent Injury Prevention*. 2008;14(6):360-5.

Daneshpazhooh M, Chams-Davatchi C, Ramezani A, Moinedin F, Hemami MR. Abortive aphthous-like oral lesions: an underreported initial presentation of pemphigus vulgaris. *Journal of the European Academy of Dermatology and Venereology : JEADV*. 2009;23(2):157-9.

Daniels CE, Montori VM, Dupras DM. Effect of publication bias on retrieval bias. *Academic medicine : journal of the Association of American Medical Colleges*. 2002;77(3):266.

Dano H, Skov T, Lynge E. Underreporting of occupational cancers in Denmark. *Scandinavian journal of work, environment & health*. 1996;22(1):55-7.

Dans AL, Dans LF, Lansang MAD, Silvestre MAA, Guyatt GH. Controversy and debate on dengue vaccine series-paper 1: review of a licensed dengue vaccine: inappropriate subgroup analyses and selective reporting may cause harm in mass vaccination programs. *Journal of clinical epidemiology*. 2018;95:137-9.

Dans AL, Dans LF, Lansang MAD, Silvestre MAA, Guyatt GH. Controversy and debate on dengue vaccine series-paper 3: final response to review of a licensed dengue vaccine: inappropriate subgroup analyses and selective reporting may cause harm in mass vaccination programs. *Journal of clinical epidemiology*. 2018;95:142.

Dardik A, Perler BA, Roseborough GS, Williams GM. Subdural hematoma after thoracoabdominal aortic aneurysm repair: an underreported complication of spinal fluid drainage? *Journal of vascular surgery*. 2002;36(1):47-50.

Dasanu CA, Bockorny B. Recurrent pseudocellulitis due to gemcitabine: underrecognized and underreported? *Journal of oncology pharmacy practice : official publication of the International Society of Oncology Pharmacy Practitioners*. 2015;21(5):377-9.

Datta Gupta N, Jurgens H. Do workers underreport morbidity? The accuracy of self-reports of chronic conditions. *Social science & medicine (1982)*. 2012;75(9):1589-94.

Davenport A. Late presentation of encapsulating peritoneal sclerosis following renal transplantation and the potential under-reporting of the incidence and

prevalence of encapsulating peritoneal sclerosis. *Nephrology* (Carlton, Vic). 2015;20(7):499-501.

David SP, Naudet F, Laude J, Radua J, Fusar-Poli P, Chu I, et al. Potential Reporting Bias in Neuroimaging Studies of Sex Differences. *Scientific reports*. 2018;8(1):6082.

David SP, Ware JJ, Chu IM, Loftus PD, Fusar-Poli P, Radua J, et al. Potential reporting bias in fMRI studies of the brain. *PloS one*. 2013;8(7):e70104.

Davidson RN, Scott JA, Behrens RH, Warhurst D. Under-reporting of malaria, a notifiable disease, in Britain. *The Journal of infection*. 1993;26(3):348-9.

Davies HD, O'Hara R, Mumenthaler MS, Cassidy EL, Buffum M, Kim JM, et al. Underreporting of behavioral problems in older hospitalized patients. *The Gerontologist*. 2005;45(4):535-8.

Davis JP, Bohn MJ. The extent of under-reporting of meningococcal disease in Wisconsin: 1980-1982. *Wisconsin medical journal*. 1984;83(1):11-4.

Davis JW, Parks SN, Kaups KL, Bennink LD, Bilello JF. Victims of domestic violence on the trauma service: unrecognized and underreported. *The Journal of trauma*. 2003;54(2):352-5.

Davison KM. Energy under-reporting in adults with mood disorders: prevalence and associated factors. *Eating and weight disorders : EWD*. 2013;18(3):323-7.

de Barra M. Reporting bias inflates the reputation of medical treatments: A comparison of outcomes in clinical trials and online product reviews. *Social science & medicine* (1982). 2017;177:248-55.

de Beurs E, Warmerdam L, Twisk J. Bias through selective inclusion and attrition: Representativeness when comparing provider performance with routine outcome monitoring data. *Clinical psychology & psychotherapy*. 2019.

de Bruin A, Treccani B, Della Sala S. Cognitive advantage in bilingualism: an example of publication bias? *Psychological science*. 2015;26(1):99-107.

De Giuseppe R, Braschi V, Bosoni D, Biino G, Stanford FC, Nappi RE, et al. Dietary underreporting in women affected by polycystic ovary syndrome: A pilot

study. *Nutrition & dietetics: the journal of the Dietitians Association of Australia*. 2018.

de Greeff SC, Spanjaard L, Dankert J, Hoebe C, Nagelkerke N, de Melker HE. Underreporting of meningococcal disease incidence in the Netherlands: results from a capture-recapture analysis based on three registration sources with correction for false positive diagnoses. *European journal of epidemiology*. 2006;21(4):315-21.

de Grooth H-J, Parienti J-J, Postema J, Loer SA, Oudemans-van Straaten HM, Girbes AR. Positive outcomes, mortality rates, and publication bias in septic shock trials. *Intensive care medicine*. 2018;44(9):1584-5.

De Lamberterie G, Maitre A, Goux S, Brambilla C, Perdrix A. How do we reduce the under-reporting of occupational primary lung cancer. *Revue des maladies respiratoires*. 2002;19(2 Pt1):190-5.

De Luca A, Porta D, D'Ippoliti D, Carboni A, Forastiere F, Perucci CA. Underreporting of AIDS cases in Lazio, Italy. *Epidemiologia e prevenzione*. 2002;26(5):234-8.

de Melker HE, Rosendaal FR, Vandenbroucke JP. Is publication bias a medical problem? *Lancet (London, England)*. 1993;342(8871):621.

de Melker HE, Rosendaal FR, Vandenbroucke JP. The importance of publication bias in medical-scientific literature. *Nederlands tijdschrift voor geneeskunde*. 1993;137(42):2126-30.

de Mello Jorge MH. Under-reporting of vital events: strategies for its decrease. *Revista de saude publica*. 1983;17(2):148-51.

de Oliveira AC, Carvalho DV. Evaluation of underreported surgical site infection evidenced by post-discharge surveillance. *Revista latino-americana de enfermagem*. 2007;15(5):992-7.

de Oliveira GP, Pinheiro RS, Coeli CM, Barreira D, Codenotti SB. Mortality information system for identifying underreported cases of tuberculosis in Brazil. *Revista brasileira de epidemiologia = Brazilian journal of epidemiology*. 2012;15(3):468-77.

De Oliveira GS, Jr., Chang R, Kendall MC, Fitzgerald PC, McCarthy RJ. Publication bias in the anesthesiology literature. *Anesthesia and analgesia*. 2012;114(5):1042-8.

de Rezende LFM, Rey-Lopez JP, de Sa TH, Chartres N, Fabbri A, Powell L, et al. Reporting bias in the literature on the associations of health-related behaviors and statins with cardiovascular disease and all-cause mortality. *PLoS biology*. 2018;16(6):e2005761.

de Vries F, Zeegers MP, Knapen LM, Goossens ME. Thiazolidinediones and cancer: duplicate publication bias? *The oncologist*. 2013;18(10):1147.

de Vries TW, van Roon EN. Low quality of reporting adverse drug reactions in paediatric randomised controlled trials. *Archives of disease in childhood*. 2010;95(12):1023-6.

de Vries YA, Roest AM, Turner EH, de Jonge P. Hiding negative trials by pooling them: a secondary analysis of pooled-trials publication bias in FDA-registered antidepressant trials. *Psychological medicine*. 2018:1-7.

Decullier E, Lheritier V, Chapuis F. Fate of biomedical research protocols and publication bias in France: retrospective cohort study. *BMJ (Clinical research ed)*. 2005;331(7507):19.

Deipolyi AR, Prabhakar AM, Naidu S, Oklu R. Needlestick Injuries in Interventional Radiology Are Common and Underreported. *Radiology*. 2017;285(3):870-5.

Delaney M, Meyer E, Cserti-Gazdewich C, Haspel RL, Lin Y, Morris A, et al. A systematic assessment of the quality of reporting for platelet transfusion studies. *Transfusion*. 2010;50(10):2135-44.

DeLong MR, Hughes DB, Blau JA, Hollenbeck ST. Publication bias and the under-reporting of complications in the literature: have we dug our own pay-for-performance grave? *Plastic and Reconstructive Surgery*. 134:4. Suppl 1. 42-3. 2014.

Demaria AN. Publication bias and journals as policemen. *Journal of the American College of Cardiology*. 2004;44(8):1707-8.

- DeMauro SB, Giaccone A, Kirpalani H, Schmidt B. Quality of reporting of neonatal and infant trials in high-impact journals. *Pediatrics*. 2011;128(3):e639-44.
- Demeulemeester M, Amad A, Bubrovszky M, Pins D, Thomas P, Jardri R. What is the real effect of 1-Hz repetitive transcranial magnetic stimulation on hallucinations? Controlling for publication bias in neuromodulation trials. *Biological psychiatry*. 2012;71(6):e15-6.
- Deneux-Tharaux C, Berg C, Bouvier-Colle M-H, Gissler M, Harper M, Nannini A, et al. Underreporting of pregnancy-related mortality in the United States and Europe. *Obstetrics and gynecology*. 2005;106(4):684-92.
- D'Errico S. Commentary. Fentanyl-related death and the underreporting risk. *Journal of forensic and legal medicine*. 2018;60:35-7.
- Deryabina AP, Patnaik P, El-Sadr WM. Underreported injection drug use and its potential contribution to reported increase in sexual transmission of HIV in Kazakhstan and Kyrgyzstan. *Harm reduction journal*. 2019;16(1):1.
- Detrick P, Chibnall JT. Underreporting on the MMPI-2-RF in a high-demand police officer selection context: an illustration. *Psychological assessment*. 2014;26(3):1044-9.
- Devaux M, Sassi F. Social disparities in hazardous alcohol use: self-report bias may lead to incorrect estimates. *European journal of public health*. 2016;26(1):129-34.
- Devereaux PJ, Manns BJ, Ghali WA, Quan H, Guyatt GH. Reviewing the reviewers: the quality of reporting in three secondary journals. *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*. 2001;164(11):1573-6.
- DeVito NJ, Goldacre B. Catalogue of bias: publication bias. *BMJ evidence-based medicine*. 2019;24(2):53-4.
- Dhand NK, Sergeant ESG. Assessment of the proportion of under-reporting during the 2007 equine influenza outbreak in New South Wales, Australia. *Australian veterinary journal*. 2011;89 Suppl 1:73-4.

Dhillon S, Bagby RM, Kushner SC, Burchett D. The impact of underreporting and overreporting on the validity of the Personality Inventory for DSM-5 (PID-5): A simulation analog design investigation. *Psychological assessment*. 2017;29(4):473-8.

Di Maio M, Marandino L, Perrone F. Reply to the letter to the editor 'On the underreporting of health-related quality of life and regulatory approval' by Bhamidipati et al. *Annals of oncology : official journal of the European Society for Medical Oncology*. 2019;30(4):658-9.

Diaz-Quijano FA. Dengue severity: a key determinant of underreporting. *Tropical medicine & international health : TM & IH*. 2015;20(10):1403.

Dickersin K, Chalmers I. Recognizing, investigating and dealing with incomplete and biased reporting of clinical research: from Francis Bacon to the WHO. *Journal of the Royal Society of Medicine*. 2011;104(12):532-8.

Dickersin K, Chan S, Chalmers TC, Sacks HS, Smith H, Jr. Publication bias and clinical trials. *Controlled clinical trials*. 1987;8(4):343-53.

Dickersin K, Min YI. NIH clinical trials and publication bias. *The Online journal of current clinical trials*. 1993;Doc No 50:[4967 words; 53 paragraphs].

Dickersin K, Min YI. Publication bias: the problem that won't go away. *Annals of the New York Academy of Sciences*. 1993;703:135-46; discussion 46-8.

Dickersin K, Qureshi R. The Importance of Reporting Biases in Patient Care: Can We Trust the Evidence From Either Individual Studies or Systematic Reviews? *Annals of internal medicine*. 2018;169(6):413-4.

Dickersin K. How important is publication bias? A synthesis of available data. *AIDS education and prevention : official publication of the International Society for AIDS Education*. 1997;9(1 Suppl):15-21.

Dickersin K. The existence of publication bias and risk factors for its occurrence. *Jama*. 1990;263(10):1385-9.

Dieleman WIJ, Janssens IA. Can publication bias affect ecological research? A case study on soil respiration under elevated CO₂. *The New phytologist*. 2011;190(3):517-21.

Diercks GFH, Jonkman MF, Pas HH. Punctate pemphigus: an underreported direct immunofluorescence pattern. *Journal of cutaneous pathology*. 2014;41(9):756-7.

Dieterich S, Keall PJ, Orton CG. Point/Counterpoint. Increasing dependence on industry-funded research creates higher risk of biased reporting in medical physics. *Medical physics*. 2013;40(10):100601.

Difede G, Scalzo G, Bucchieri S, Moretti G, Campisi G, Napoli N, et al. Underreported vertebral fractures in an Italian population: comparison of plain radiographs vs quantitative measurements. *La Radiologia medica*. 2010;115(7):1101-10.

Dijkers FW. Underreporting adverse drug reactions--limitations of the Dutch Hospital Data database. *Nederlands tijdschrift voor geneeskunde*. 2013;157(6):A5563.

Dirnagl U, Lauritzen M. Fighting publication bias: introducing the Negative Results section. *Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2010;30(7):1263-4.

Dismuke CE. Underreporting of computed tomography and magnetic resonance imaging procedures in inpatient claims data. *Medical care*. 2005;43(7):713-7.

Dixon KN, Arnold LE, Calestro K. Father-son incest: underreported psychiatric problem? *The American journal of psychiatry*. 1978;135(7):835-8.

Doi Y. Moving toward the reduction of publication/reporting biases in clinical trials using a new international standard. [*Nihon koshu eisei zasshi*] *Japanese journal of public health*. 2016;63(10):599-605.

Domingo-Salvany A, Perez K, Hartnoll RL, Orti RM. The underreporting of drug-related episodes in a Barcelona emergency room. *American journal of public health*. 1994;84(8):1340.

Donaldson IM. Volvular epilepsy. A distinctive and underreported seizure type. *Archives of neurology*. 1986;43(3):260-2.

Dong XS, Fujimoto A, Ringen K, Stafford E, Platner JW, Gittleman JL, et al. Injury underreporting among small establishments in the construction industry. *American journal of industrial medicine*. 2011;54(5):339-49.

Dorr DA, Burdon R, West DP, Lagman J, Georgopoulos C, Belknap SM, et al. Quality of reporting of serious adverse drug events to an institutional review board: a case study with the novel cancer agent, imatinib mesylate. *Clinical cancer research : an official journal of the American Association for Cancer Research*. 2009;15(11):3850-5.

Dougall B, Gendreau J, Das S, Markham C, Capulong D, Lau C, et al. Melanoma Registry Underreporting in the Veterans Health Administration. *Federal practitioner : for the health care professionals of the VA, DoD, and PHS*. 2016;33(Suppl 5):55S-9S.

Downer MC, Holloway PJ, Davies TG. Efficiency of clinical trials: selective inclusion of study subjects. *Journal of dental research*. 1977;56 Spec No:C123-9.

Dray X, De Parades V, Lechaux JP, Hubert D, Marteau P. Is cystic fibrosis an underreported cause of rectal prolapse in adults? *Gastroenterologie clinique et biologique*. 2001;25(8-9):825-6.

Dreier M, Meyer T, Walter U. Report bias favours screening. *BMJ (Clinical research ed)*. 2011;342:d3703.

Dreyer AW, Mbambo D, Machaba M, Oliphant CEM, Claassens MM. Tuberculosis cure rates and the ETR.Net: investigating the quality of reporting treatment outcomes from primary healthcare facilities in Mpumalanga province, South Africa. *BMC health services research*. 2017;17(1):190.

Driessen E, Hollon SD, Bockting CLH, Cuijpers P, Turner EH. Does Publication Bias Inflate the Apparent Efficacy of Psychological Treatment for Major Depressive Disorder? A Systematic Review and Meta-Analysis of US National Institutes of Health-Funded Trials. *PloS one*. 2015;10(9):e0137864.

Drumond EdF, Machado CJ, Franca E. Underreporting of live births: measurement procedures using the Hospital Information System. *Revista de saude publica*. 2008;42(1):55-63.

Duffett M, Burns KE, Adhikari NK, Arnold DM, Lauzier F, Kho ME, et al. Quality of reporting of surveys in critical care journals: a methodologic review. *Critical care medicine*. 2012;40(2):441-9.

Duffy JC, Waterton JJ. Under-reporting of alcohol consumption in sample surveys: the effect of computer interviewing in fieldwork. *British journal of addiction*. 1984;79(3):303-8.

Durham J, Hill PS, Hoy D. The underreporting of landmine and explosive remnants of war injuries in Cambodia, the Lao People's Democratic Republic and Viet Nam. *Bulletin of the World Health Organization*. 2013;91(3):234-6.

Dwan K, Altman DG, Arnaiz JA, Bloom J, Chan A-W, Cronin E, et al. Systematic review of the empirical evidence of study publication bias and outcome reporting bias. *PloS one*. 2008;3(8):e3081.

Dwan K, Altman DG, Clarke M, Gamble C, Higgins JPT, Sterne JAC, et al. Evidence for the selective reporting of analyses and discrepancies in clinical trials: a systematic review of cohort studies of clinical trials. *PLoS medicine*. 2014;11(6):e1001666.

Dwan K, Altman DG, Clarke M, Gamble C, Higgins JPT, Sterne JAC, Williamson PR, Kirkham JJ. Evidence for the selective reporting of analyses and discrepancies in clinical trials: a systematic review of cohort studies of clinical trials. *PLoS Medicine*. 11:6. e1001666. 2014.

Dwan K, Gamble C, Kolamunnage-Dona R, Mohammed S, Powell C, Williamson PR. Assessing the potential for outcome reporting bias in a review: a tutorial. *Trials*. 2010;11:52.

Dwan K, Gamble C, Williamson PR, Kirkham JJ, Reporting Bias G. Systematic review of the empirical evidence of study publication bias and outcome reporting bias - an updated review. *PloS one*. 2013;8(7):e66844.

Dwan K, Kirkham JJ, Williamson PR, Gamble C. Selective reporting of outcomes in randomised controlled trials in systematic reviews of cystic fibrosis. *BMJ open*. 2013;3(6).

Earp BD, Wilkinson D. The publication symmetry test: a simple editorial heuristic to combat publication bias. *Journal of clinical and translational research*. 2018;3(Suppl 2):348-50.

Easterbrook P. Reducing publication bias. *British medical journal (Clinical research ed)*. 1987;295(6609):1347.

Easterbrook PJ, Berlin JA, Gopalan R, Matthews DR. Publication bias in clinical research. *Lancet (London, England)*. 1991;337(8746):867-72.

Echeverria G, Reyna-Bello A, Minda-Aluisa E, Celi-Erazo M, Olmedo L, Garcia HA, et al. Serological evidence of *Coxiella burnetii* infection in cattle and farm workers: is Q fever an underreported zoonotic disease in Ecuador? *Infection and drug resistance*. 2019;12:701-6.

Edwards HA, Schroeder J, Dugdale HL. Correction: Gender differences in authorships are not associated with publication bias in an evolutionary journal. *PloS one*. 2019;14(5):e0217251.

Edwards HA, Schroeder J, Dugdale HL. Gender differences in authorships are not associated with publication bias in an evolutionary journal. *PloS one*. 2018;13(8):e0201725.

Edwards JP, Dharampal N, Chung W, Brar MS, Ball CG, Seto J, et al. Has the quality of reporting of randomized controlled trials in thoracic surgery improved? *European journal of cardio-thoracic surgery : official journal of the European Association for Cardio-thoracic Surgery*. 2016;49(5):1476-82.

Egan G, Lee J, Minhas R, Tejani AM. Does outcome reporting bias "cause" cancer? Risks associated with hidden data on Angiotensin receptor blockers. *The Canadian journal of hospital pharmacy*. 2012;65(5):387-93.

Eikendal ALM, Gohar A, Rutten FH, Bots ML, Appelman Y, Hofstra L, et al. Sex-Specific Relations of Cardiovascular Risk Factors With Left Ventricular Diastolic

Dysfunction/Heart Failure With Preserved Ejection Fraction Are Underreported: A Call for Action. *Journal of cardiac failure*. 2018;24(6):412-4.

Ekmekci PE. An increasing problem in publication ethics: Publication bias and editors' role in avoiding it. *Medicine, health care, and philosophy*. 2017;20(2):171-8.

Elferink-Stinkens PM, Brand R, Verloove-Vanhorick SP, van Hemel OJ. Underreporting of first-week mortality in premature childbirth in the National Obstetrics Register. *Nederlands tijdschrift voor geneeskunde*. 1993;137(6):298-301.

Elger CE, Hoppe C. Diagnostic challenges in epilepsy: seizure under-reporting and seizure detection. *The Lancet Neurology*. 2018;17(3):279-88.

Elliott MR, Margulies SS, Maltese MR, Arbogast KB. Accounting for sampling variability, injury under-reporting, and sensor error in concussion injury risk curves. *Journal of biomechanics*. 2015;48(12):3059-65.

Elvik R. Corrigendum to: Publication bias and time-trend bias in meta-analysis of bicycle helmet efficacy: a re-analysis of Attewell, Glase and McFadden, 2001 *Accid. Anal. Prev.* 43 (2011) 1245-1251. *Accident; analysis and prevention*. 2013;60:245-53.

Elvik R. Publication bias and time-trend bias in meta-analysis of bicycle helmet efficacy: a re-analysis of Attewell, Glase and McFadden, 2001. *Accident; analysis and prevention*. 2011;43(3):1245-51.

Engeler I, Raghubir P. Decomposing the cross-sex misprediction bias of dating behaviors: Do men overestimate or women underreport their sexual intentions? *Journal of personality and social psychology*. 2018;114(1):95-109.

Engleman HM, Hirst WS, Douglas NJ. Under reporting of sleepiness and driving impairment in patients with sleep apnoea/hypopnoea syndrome. *Journal of sleep research*. 1997;6(4):272-5.

Epstein M, Moreno R, Bacchetti P. The underreporting of deaths of American Indian children in California, 1979 through 1993. *American journal of public health*. 1997;87(8):1363-6.

Epstein M. Under-reporting of psychiatric illness. Australian family physician. 1993;22(9):1525, 7.

Ernhart CB, Morrow-Tlucak M, Sokol RJ, Martier S. Underreporting of alcohol use in pregnancy. Alcoholism, clinical and experimental research. 1988;12(4):506-11.

Ernst E. Publication bias in complementary/alternative medicine. Journal of clinical epidemiology. 2007;60(11):1093-4.

Erwin PC, Brumley D, Bristow F. Physician reporting of communicable diseases in east Tennessee: implications for statewide underreporting. Tennessee medicine : journal of the Tennessee Medical Association. 1999;92(2):61-2.

Esposito E, Cipriani A, Barbui C. Outcome reporting bias in clinical trials. Epidemiologia e psichiatria sociale. 2009;18(1):17-8.

Ethgen M, Boutron L, Steg PG, Roy C, Ravaud P. Quality of reporting internal and external validity data from randomized controlled trials evaluating stents for percutaneous coronary intervention. BMC medical research methodology. 2009;9:24.

Evanoff B, Abedin S, Grayson D, Dale AM, Wolf L, Bohr P. Is disability underreported following work injury? Journal of occupational rehabilitation. 2002;12(3):139-50.

Evans BG. Estimating underreporting of AIDS: straightforward in theory--difficult in practice. AIDS (London, England). 1991;5(10):1261-2.

Evers JL. Publication bias in reproductive research. Human reproduction (Oxford, England). 2000;15(10):2063-6.

Ewigman B, Kivlahan C, Land G. The Missouri child fatality study: underreporting of maltreatment fatalities among children younger than five years of age, 1983 through 1986. Pediatrics. 1993;91(2):330-7.

Eysenbach G. Tackling publication bias and selective reporting in health informatics research: register your eHealth trials in the International eHealth Studies Registry. Journal of medical Internet research. 2004;6(3):e35.

Ezzati M, Martin H, Skjold S, Vander Hoorn S, Murray CJL. Trends in national and state-level obesity in the USA after correction for self-report bias: analysis of health surveys. *Journal of the Royal Society of Medicine*. 2006;99(5):250-7.

Facchin LT, Gir E, Pazin-Filho A, Hayashida M, da Silva Canini SRM. Under-reporting of accidents involving biological material by nursing professionals at a Brazilian emergency hospital. *International journal of occupational safety and ergonomics : JOSE*. 2013;19(4):623-9.

Faggion CM, Jr., Aranda L, Diaz KT, Shih M-C, Tu Y-K, Alarcon MA. The Quality of Reporting of Measures of Precision in Animal Experiments in Implant Dentistry: A Methodological Study. *The International journal of oral & maxillofacial implants*. 2016;31(6):1312-19.

Faggion CM, Jr., Giannakopoulos NN. Quality of reporting in abstracts of randomized controlled trials published in leading journals of periodontology and implant dentistry: a survey. *Journal of periodontology*. 2012;83(10):1251-6.

Faggion CM, Jr., Liu J, Huda F, Atieh M. Assessment of the quality of reporting in abstracts of systematic reviews with meta-analyses in periodontology and implant dentistry. *Journal of periodontal research*. 2014;49(2):137-42.

Fairfield CJ, Harrison EM, Wigmore SJ. Duplicate publication bias weakens the validity of meta-analysis of immunosuppression after transplantation. *World journal of gastroenterology*. 2017;23(39):7198-200.

Fan ZJ, Bonauto DK, Foley MP, Silverstein BA. Underreporting of work-related injury or illness to workers' compensation: individual and industry factors. *Journal of occupational and environmental medicine*. 2006;48(9):914-22.

Fantony JJ, Gopalakrishna A, Noord MV, Inman BA. Reporting Bias Leading to Discordant Venous Thromboembolism Rates in the United States Versus Non-US Countries Following Radical Cystectomy: A Systematic Review and Meta-analysis. *European urology focus*. 2016;2(2):189-96.

Farquhar C, Armstrong S, Kim B, Masson V, Sadler L. Under-reporting of maternal and perinatal adverse events in New Zealand. *BMJ open*. 2015;5(7):e007970.

Farzanfar D, Abumuamar A, Kim J, Sirotich E, Wang Y, Pullenayegum E. Longitudinal studies that use data collected as part of usual care risk reporting biased results: a systematic review. *BMC medical research methodology*. 2017;17(1):133.

Fassett RG, Robertson IK, Geraghty DP, Ball MJ, Coombes JS. Dietary intake of patients with chronic kidney disease entering the LORD trial: adjusting for underreporting. *Journal of renal nutrition : the official journal of the Council on Renal Nutrition of the National Kidney Foundation*. 2007;17(4):235-42.

Fei Y-T, Liu J-P. Improving the quality of reporting Chinese herbal medicine trials: an elaborated checklist. *Zhong xi yi jie he xue bao = Journal of Chinese integrative medicine*. 2008;6(3):233-8.

Feldman JM, Gruskin S, Coull BA, Krieger N. Correction: Quantifying underreporting of law-enforcement-related deaths in United States vital statistics and news-media-based data sources: A capture-recapture analysis. *PLoS medicine*. 2017;14(10):e1002449.

Feldstein CA. Nocturia in arterial hypertension: a prevalent, underreported, and sometimes underestimated association. *Journal of the American Society of Hypertension : JASH*. 2013;7(1):75-84.

Felton SJ, Orton D, Williams JDL. Benzoyl peroxide in topical acne preparations: an underreported contact allergen? *Dermatitis : contact, atopic, occupational, drug*. 2013;24(3):146-7.

Ferguson CJ, Brannick MT. Publication bias in psychological science: prevalence, methods for identifying and controlling, and implications for the use of meta-analyses. *Psychological methods*. 2012;17(1):120-8.

Ferguson CJ, Heene M. A Vast Graveyard of Undead Theories: Publication Bias and Psychological Science's Aversion to the Null. *Perspectives on psychological science : a journal of the Association for Psychological Science*. 2012;7(6):555-61.

Ferguson CJ. Pay No Attention to That Data Behind the Curtain: On Angry Birds, Happy Children, Scholarly Squabbles, Publication Bias, and Why Betas Rule

Metas. Perspectives on psychological science : a journal of the Association for Psychological Science. 2015;10(5):683-91.

Fergusson DA, Avey MT, Barron CC, Bocock M, Biefer KE, Boet S, et al. Reporting preclinical anesthesia study (REPEAT): Evaluating the quality of reporting in the preclinical anesthesiology literature. PloS one. 2019;14(5):e0215221.

Fernandez K, Boccaccini MT, Noland RM. Detecting over- and underreporting of psychopathology with the Spanish-language Personality Assessment Inventory: findings from a simulation study with bilingual speakers. Psychological assessment. 2008;20(2):189-94.

Fernandez-Cano MI, Armadans Gil L, Martinez Gomez X, Campins Marti M. Incidence of whooping cough in Spain (1997-2010): an underreported disease. European journal of pediatrics. 2014;173(6):721-6.

Ferns T. Under-reporting of violent incidents against nursing staff. Nursing standard (Royal College of Nursing (Great Britain) : 1987). 2006;20(40):41-5.

Ferrando J, Borrell C, Ricart M, Plasencia A. The underreporting of perinatal mortality: 10 years' experience of active surveillance in Barcelona. Medicina clinica. 1997;108(9):330-5.

Ferreira GM, Harrison BJ, Fontenelle LF. Hatred of sounds: misophonic disorder or just an underreported psychiatric symptom? Annals of clinical psychiatry : official journal of the American Academy of Clinical Psychiatrists. 2013;25(4):271-4.

Ferreira VM, Portela MC, Vasconcellos MT. Variables associated with underreporting of AIDS patients in Rio de Janeiro, Brazil, 1996. Revista de saude publica. 2000;34(2):170-7.

Ferriolli E, Pfrimer K, Moriguti JC, Lima NKC, Moriguti ECU, Formighieri PF, et al. Under-reporting of food intake is frequent among Brazilian free-living older persons: a doubly labelled water study. Rapid communications in mass spectrometry : RCM. 2010;24(5):506-10.

Fielding JR. Publication Bias in Radiology: How Does It Happen and What Is the Cost? *Radiology*. 2019;190985.

Figueroa JP, Brathwaite AR. Is under-reporting of AIDS a problem in Jamaica? *The West Indian medical journal*. 1995;44(2):51-4.

Figueroa JP, Clarke R. Under-reporting of tetanus and diphtheria cases in Jamaica (1980-1986). *The West Indian medical journal*. 1988;37(3):143-7.

Finkelhor D, Ormrod RK. Factors in the underreporting of crimes against juveniles. *Child maltreatment*. 2001;6(3):219-29.

Fitts Willoughby J, Furberg R. Underdeveloped or underreported? Coverage of pretesting practices and recommendations for design of text message-based health behavior change interventions. *Journal of health communication*. 2015;20(4):472-8.

Flam F, Rutqvist LE, Lundstrom-Lindstedt V. The cancer registry is not reliable. Trophoblastic diseases are underreported. *Lakartidningen*. 1991;88(47):4021-2.

Flegel K, Oseasohn R. Adverse effects of diagnostic tests. A study of the quality of reporting. *Archives of internal medicine*. 1982;142(5):883-7.

Fleming PS, Koletsi D, Dwan K, Pandis N. Outcome discrepancies and selective reporting: impacting the leading journals? *PloS one*. 2015;10(5):e0127495.

Fleming WH, Sarafian LB, Yarbrough JW, Kugler JD, Mooring PK. Epicardial corkscrew lead fracture: an underreported cause of pacing failure? *The Annals of thoracic surgery*. 1983;35(5):535-7.

Fletcher SM, Lewis-Fuller E, Williams H, Miller Z, Scarlett HP, Cooper C, et al. Magnitude, distribution, and estimated level of underreporting of acute gastroenteritis in Jamaica. *Journal of health, population, and nutrition*. 2013;31(4 Suppl 1):69-80.

Fogelberg M, Baranov A, Herbst A, Vikhareva O. Underreporting of complete uterine rupture and uterine dehiscence in women with previous cesarean section. *The journal of maternal-fetal & neonatal medicine : the official journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania*

Perinatal Societies, the International Society of Perinatal Obstetricians. 2017;30(17):2058-61.

Fonseca L, Najarro-Quispe R, Rodriguez-Hernandez A, Torne R, Gandara-Sabatini D, Arikan F, et al. Symptomatic delayed coil migration after balloon assisted embolization: An underreported adverse event? Neurocirugia (Asturias, Spain). 2019;30(2):87-93.

Formann AK. Estimating the proportion of studies missing for meta-analysis due to publication bias. Contemporary clinical trials. 2008;29(5):732-9.

Forsetlund L, Reinar LM. Quality of reporting and of methodology of studies on interventions for trophic ulcers in leprosy: a systematic review. Indian journal of dermatology, venereology and leprology. 2008;74(4):331-7.

Fox GN, Stausmire JM, Mehregan DR. Traction folliculitis: an underreported entity. Cutis. 2007;79(1):26-30.

Fragkos KC, Tsagris M, Frangos CC. Publication Bias in Meta-Analysis: Confidence Intervals for Rosenthal's Fail-Safe Number. International scholarly research notices. 2014;2014:825383.

Franca S, Marchand C, Craplet C, Basdevant A, d'Ivernois JF. Application of "Concept Mapping" in obese subjects: a pilot study in normo and underreporters. Diabetes & metabolism. 2003;29(1):72-8.

Francis G. Evidence that publication bias contaminated studies relating social class and unethical behavior. Proceedings of the National Academy of Sciences of the United States of America. 2012;109(25):E1587; author reply E8.

Francis G. Publication bias and the failure of replication in experimental psychology. Psychonomic bulletin & review. 2012;19(6):975-91.

Francis G. Publication bias in "Red, rank, and romance in women viewing men," by Elliot et al. (2010). Journal of experimental psychology General. 2013;142(1):292-6.

Francis G. The same old New Look: Publication bias in a study of wishful seeing. i-Perception. 2012;3(3):176-8.

Francis G. Too good to be true: publication bias in two prominent studies from experimental psychology. *Psychonomic bulletin & review*. 2012;19(2):151-6.

Franco A, Malhotra N, Simonovits G. Social science. Publication bias in the social sciences: unlocking the file drawer. *Science* (New York, NY). 2014;345(6203):1502-5.

Freeman K, Szczepura A, Osipenko L. Non-invasive fetal RHD genotyping tests: a systematic review of the quality of reporting of diagnostic accuracy in published studies. *European journal of obstetrics, gynecology, and reproductive biology*. 2009;142(2):91-8.

Freemantle N, Mason J. Publication bias in clinical trials and economic analyses. *PharmacoEconomics*. 1997;12(1):10-6.

Frias PGd, Pereira PMH, Andrade CLTd, Szwarcwald CL. Mortality Data System: a case study on municipalities with data underreporting. *Cadernos de saude publica*. 2008;24(10):2257-66.

Fricker J, Baelde D, Igoin-Apfelbaum L, Huet JM, Apfelbaum M. Underreporting of food intake in obese "small eaters". *Appetite*. 1992;19(3):273-83.

Friedman CP, Wyatt JC. Publication bias in medical informatics. *Journal of the American Medical Informatics Association : JAMIA*. 2001;8(2):189-91.

Friedman DE, Gilliam FG. Seizure-related injuries are underreported in pharmacoresistant localization-related epilepsy. *Epilepsia*. 2010;51(1):43-7.

Friedman SR, Jose B. Hepatitis C transmission and the underreporting of stigmatized behaviors. *Sexually transmitted diseases*. 1998;25(4):220-1.

Friis-Liby I, Meresaar U, Olsson KS. Is flucloxacillin-induced liver damage an underreported complication? *Lakartidningen*. 1999;96(42):4535-6.

Fritzsche C, Heine M, Loebermann M, Klammt S, Podbielski A, Mittlmeier T, et al. Reducing the underreporting of percutaneous exposure incidents: A single-center experience. *American journal of infection control*. 2016;44(8):941-3.

Frosi G, Riley RD, Williamson PR, Kirkham JJ. Multivariate meta-analysis helps examine the impact of outcome reporting bias in Cochrane rheumatoid arthritis reviews. *Journal of clinical epidemiology*. 2015;68(5):542-50.

Frost M, Wraae K, Gudex C, Nielsen T, Brixen K, Hagen C, et al. Chronic diseases in elderly men: underreporting and underdiagnosis. *Age and ageing*. 2012;41(2):177-83.

Fu H, Darroch JE, Henshaw SK, Kolb E. Measuring the extent of abortion underreporting in the 1995 National Survey of Family Growth. *Family planning perspectives*. 1998;30(3):128-33, 38.

Funtikova AN, Gomez SF, Fito M, Elosua R, Benitez-Arciniega AA, Schroder H. Effect of energy under-reporting on secular trends of dietary patterns in a mediterranean population. *PloS one*. 2015;10(5):e0127647.

Furtado da Luz E, Braga JU. Under-reporting of tuberculosis in Praia, Cape Verde, from 2006 to 2012. *The international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease*. 2018;22(3):258-63.

Fusar-Poli P, Radua J, Frascarelli M, Mechelli A, Borgwardt S, Di Fabio F, et al. Evidence of reporting biases in voxel-based morphometry (VBM) studies of psychiatric and neurological disorders. *Human brain mapping*. 2014;35(7):3052-65.

Gabriel OO, Jaime A, McKensie M, Auguste A, Perez E, Indar L. Estimating the burden of acute gastrointestinal illness: a pilot study of the prevalence and underreporting in Saint Lucia, Eastern Caribbean. *Journal of health, population, and nutrition*. 2013;31(4 Suppl 1):3-16.

Gadde P, Penmetsa GS, Rayalla K. Do dental research journals publish only positive results? A retrospective assessment of publication bias. *Journal of Indian Society of Periodontology*. 2018;22(4):294-7.

Gaddis GM, Olson JE, Wright DW. Pharmaceutical advertising policy of Academic Emergency Medicine was incompletely reported and mischaracterized

in the statement of EMA's new no-pharmaceutical ads policy. *Emergency medicine Australasia* : EMA. 2011;23(5):654-5.

Gagnier J, Boon H, Rochon P, Barnes J, Moher D, Bombardier C, et al. Improving the quality of reporting of randomized controlled trials evaluating herbal interventions: implementing the CONSORT statement corrected. *Explore (New York, NY)*. 2006;2(2):143-9.

Gagnier JJ, DeMelo J, Boon H, Rochon P, Bombardier C. Quality of reporting of randomized controlled trials of herbal medicine interventions. *The American journal of medicine*. 2006;119(9):800.e1-11.

Gagnier JJ, Moher D, Boon H, Beyene J, Bombardier C. Randomized controlled trials of herbal interventions underreport important details of the intervention. *Journal of clinical epidemiology*. 2011;64(7):760-9.

Galanopoulou AS, Schmidt D, Wang X, Mathern GW. Minimizing publication bias in *Epilepsia Open*: Negative or confirmatory studies and preliminary reports. *Epilepsia open*. 2016;1(3-4):74-5.

Galizzi M, Miesmaa P, Punnett L, Slatin C, Phase In Healthcare Research T. Injured Workers' Underreporting in the Health Care Industry: An Analysis Using Quantitative, Qualitative, and Observational Data. *Industrial relations*. 2010;49(1):22-43.

Gallo G, Majori S, Poli A, Pascu D, Zolin R, Piovesan C, et al. Evaluation of the underreporting of tuberculosis through the linkage of 5 different information sources. *Annali di igiene : medicina preventiva e di comunita*. 2000;12(5):365-71.

Gallus S, Tramacere I, Boffetta P, Fernandez E, Rossi S, Zuccaro P, et al. Temporal changes of under-reporting of cigarette consumption in population-based studies. *Tobacco control*. 2011;20(1):34-9.

Gamado K, Streftaris G, Zachary S. Estimation of under-reporting in epidemics using approximations. *Journal of mathematical biology*. 2017;74(7):1683-707.

Gamado KM, Streftaris G, Zachary S. Modelling under-reporting in epidemics. *Journal of mathematical biology*. 2014;69(3):737-65.

Gao J, Deng G, Hu Y, Huang Y, Lu L, Huang D, et al. Quality of reporting on randomized controlled trials on recurrent spontaneous abortion in China. *Trials*. 2015;16:172.

Garbin AJI, Martins RJ, Belila NdM, Exaltacao SM, Garbin CAS. Reemerging diseases in Brazil: sociodemographic and epidemiological characteristics of syphilis and its under-reporting. *Revista da Sociedade Brasileira de Medicina Tropical*. 2019;52:e20180226.

Garcia-Cabo C, Moris G. Peripheral neuropathy: an underreported neurologic manifestation of inflammatory bowel disease. *European journal of internal medicine*. 2015;26(7):468-75.

Garcia-de Cruz S, Aldea-Mansilla C, Del Villar Sordo V. Under-reporting of tuberculosis disease. *Medicina clinica*. 2017;149(3):131.

Garcia-Suarez J, de Miguel D, Krsnik I, Barr-Ali M, Hernanz N, Burgaleta C. Spontaneous gas gangrene in malignant lymphoma: an underreported complication? *American journal of hematology*. 2002;70(2):145-8.

Garriguet D. Impact of identifying plausible respondents on the under-reporting of energy intake in the Canadian Community Health Survey. *Health reports*. 2008;19(4):47-55.

Garriguet D. Under-reporting of energy intake in the Canadian Community Health Survey. *Health reports*. 2008;19(4):37-45.

Garrison LP, Jr., Lewin J, Young CH, Genereux P, Crittendon J, Mann MR, et al. The clinical and cost burden of coronary calcification in a Medicare cohort: An economic model to address under-reporting and misclassification. *Cardiovascular revascularization medicine : including molecular interventions*. 2015;16(7):406-12.

Gaston RG, Lourie GM. Radial collateral ligament injury of the index metacarpophalangeal joint: an underreported but important injury. *The Journal of hand surgery*. 2006;31(8):1355-61.

Gaunt TR, Davey Smith G. eNOS and coronary artery disease: publication bias and the eclipse of hypothesis-driven meta-analysis in genetic association studies. *Gene*. 2015;556(2):257-8.

Gayer G, Sarouk I, Kanaany N, Efrati O. Tracheal diverticula in cystic fibrosis-A potentially important underreported finding on chest CT. *Journal of cystic fibrosis : official journal of the European Cystic Fibrosis Society*. 2016;15(4):503-9.

Gazmuri RJ, Shakeri SA. Blood transfusion and the risk of nosocomial infection: an underreported complication? *Critical care medicine*. 2002;30(10):2389-91.

Ge L, Wang J-C, Li J-L, Liang L, An N, Shi X-T, et al. The assessment of the quality of reporting of systematic reviews/meta-analyses in diagnostic tests published by authors in China. *PloS one*. 2014;9(1):e85908.

Gebreel AO. Afghanistan: a biased report. *BMJ (Clinical research ed)*. 1997;314(7083):829-30.

Geddes J, Szatmari P, Streiner D. The worm turns: publication bias and trial registers revisited. *Evidence-based mental health*. 2004;7(4):98-9.

Geiger JD, Newsted J, Drongowski RA, Lelli JL. Car surfing: an underreported mechanism of serious injury in children and adolescents. *Journal of pediatric surgery*. 2001;36(1):232-4.

Gelinsky E, Hilbeck A. European Court of Justice ruling regarding new genetic engineering methods scientifically justified: a commentary on the biased reporting about the recent ruling. *Environmental sciences Europe*. 2018;30(1):52.

Geller NL. Discussion on "Quantifying Publication Bias in Meta-Analysis" by Lin and Chu. *Biometrics*. 2018;74(3):800.

Gellert GA, Ralls J, Brown C, Huston J, Merryman R. Scombroid fish poisoning. Underreporting and prevention among noncommercial recreational fishers. *The Western journal of medicine*. 1992;157(6):645-7.

Gemming L, Doherty A, Kelly P, Utter J, Ni Mhurchu C. Feasibility of a SenseCam-assisted 24-h recall to reduce under-reporting of energy intake. *European journal of clinical nutrition*. 2013;67(10):1095-9.

Gemming L, Jiang Y, Swinburn B, Utter J, Mhurchu CN. Under-reporting remains a key limitation of self-reported dietary intake: an analysis of the 2008/09 New

Zealand Adult Nutrition Survey. *European journal of clinical nutrition*. 2014;68(2):259-64.

Gemming L, Ni Mhurchu C. Dietary under-reporting: what foods and which meals are typically under-reported? *European journal of clinical nutrition*. 2016;70(5):640-1.

Gemming L, Rush E, Maddison R, Doherty A, Gant N, Utter J, et al. Wearable cameras can reduce dietary under-reporting: doubly labelled water validation of a camera-assisted 24h recall. *The British journal of nutrition*. 2015;113(2):284-91.

George D, Hss A-S, Hassali A. Medication Error Reporting: Underreporting and Acceptability of Smartphone Application for Reporting among Health Care Professionals in Perak, Malaysia. *Cureus*. 2018;10(6):e2746.

Gerard K, Seymour J, Smoker I. A tool to improve quality of reporting published economic analyses. *International journal of technology assessment in health care*. 2000;16(1):100-10.

Germini F, Marcucci M, Fedele M, Galli MG, Mbuagbaw L, Salvatori V, et al. Quality of reporting in abstracts of RCTs published in emergency medicine journals: a protocol for a systematic survey of the literature. *BMJ open*. 2017;7(4):e014981.

Gertig DM, Marion SA, Schechter MT. Estimating the extent of underreporting in AIDS surveillance. *AIDS (London, England)*. 1991;5(10):1157-64.

Ghaemi SN. The failure to know what isn't known: negative publication bias with lamotrigine and a glimpse inside peer review. *Evidence-based mental health*. 2009;12(3):65-8.

Ghaferi AA, Osborne NH, Dimick JB. Does voluntary reporting bias hospital quality rankings? *The Journal of surgical research*. 2010;161(2):190-4.

Ghosh P, Dewanji A. Effect of reporting bias in the analysis of spontaneous reporting data. *Pharmaceutical statistics*. 2015;14(1):20-5.

Giambi C, Bella A, Filia A, Del Manso M, Nacca G, Declich S, et al. Erratum to: Underreporting of congenital rubella in Italy, 2010-2014. *European journal of pediatrics*. 2017;176(8):1145.

Giambi C, Bella A, Filia A, Del Manso M, Nacca G, Declich S, et al. Underreporting of congenital rubella in Italy, 2010-2014. *European journal of pediatrics*. 2017;176(7):955-62.

Gibbons CL, Mangen M-JJ, Plass D, Havelaar AH, Brooke RJ, Kramarz P, et al. Measuring underreporting and under-ascertainment in infectious disease datasets: a comparison of methods. *BMC public health*. 2014;14:147.

Giblett JP, Brown AJ, Hoole SP, West NEJ. Early disarticulation of a bioresorbable vascular scaffold: an underreported consequence of repeat imaging. *Cardiovascular intervention and therapeutics*. 2018;33(2):175-7.

Gibson S, Neate D. Sugar intake, soft drink consumption and body weight among British children: further analysis of National Diet and Nutrition Survey data with adjustment for under-reporting and physical activity. *International journal of food sciences and nutrition*. 2007;58(6):445-60.

Gignoux E, Idowu R, Bawo L, Hurum L, Sprecher A, Bastard M, et al. Use of Capture-Recapture to Estimate Underreporting of Ebola Virus Disease, Montserrado County, Liberia. *Emerging infectious diseases*. 2015;21(12):2265-7.

Giguere K, Behanzin L, Guedou FA, Leblond FA, Goma-Matsetse E, Zannou DM, et al. Biological Validation of Self-Reported Unprotected Sex and Comparison of Underreporting Over Two Different Recall Periods Among Female Sex Workers in Benin. *Open forum infectious diseases*. 2019;6(2):ofz010.

Gilbert NL, N'Doutabe M. Under-reporting of neonatal tetanus in the Kayes Region of Mali. *Sante (Montrouge, France)*. 2007;17(4):193-4.

Gilbody S, House A. Publication bias and meta-analysis. *The British journal of psychiatry : the journal of mental science*. 1995;167(2):266.

Gilbody SM, Song F, Eastwood AJ, Sutton A. The causes, consequences and detection of publication bias in psychiatry. *Acta psychiatrica Scandinavica*. 2000;102(4):241-9.

Gilbody SM, Song F. Publication bias and the integrity of psychiatry research. *Psychological medicine*. 2000;30(2):253-8.

Gilmore-Bykovskyi A, Johnson R, Walljasper L, Block L, Werner N. Underreporting of Gender and Race/Ethnicity Differences in NIH-Funded Dementia Caregiver Support Interventions. *American journal of Alzheimer's disease and other dementias*. 2018;33(3):145-52.

Gilsenan MB, Gibney MJ. Assessment of the influence of energy under-reporting on intake estimates of four food additives. *Food additives and contaminants*. 2004;21(3):195-203.

Ginter E. Biased reporting on cardiovascular mortality in Europe. *Bratislavske lekarske listy*. 2010;111(10):574.

Gisquet E, Chamming's S, Paireon JC, Gilg Soit Ilg A, Imbernon E, Goldberg M. The determinants of under-reporting occupational diseases. The case of mesothelioma. *Revue d'epidemiologie et de sante publique*. 2011;59(6):393-400.

Gjerdevik M, Heuch I. Improving the error rates of the Begg and Mazumdar test for publication bias in fixed effects meta-analysis. *BMC medical research methodology*. 2014;14:109.

Glanz K, Grove J, Le Marchand L, Gotay C. Underreporting of family history of colon cancer: correlates and implications. *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*. 1999;8(7):635-9.

Glujovsky D, Boggino C, Riestra B, Coscia A, Sueldo CE, Ciapponi A. Quality of reporting in infertility journals. *Fertility and sterility*. 2015;103(1):236-41.

Gnardellis C, Boulou C, Trichopoulou A. Magnitude, determinants and impact of under-reporting of energy intake in a cohort study in Greece. *Public health nutrition*. 1998;1(2):131-7.

Gnech M, Lovatt CA, McGrath M, Rickard M, Sanger S, Lorenzo AJ, et al. Quality of reporting and fragility index for randomized controlled trials in the vesicoureteral reflux literature: where do we stand? *Journal of pediatric urology*. 2019.

Gohari F, Baradaran HR, Tabatabaee M, Anijidani S, Mohammadpour Touserani F, Atlasi R, et al. Quality of reporting randomized controlled trials (RCTs) in diabetes in Iran; a systematic review. *Journal of diabetes and metabolic disorders*. 2015;15(1):36.

Gohil AJ, Sahu S, Lamba S, Gupta AK. Pneumothorax: A rare or underreported complication following latissimus dorsi muscle flap. *Indian journal of plastic surgery : official publication of the Association of Plastic Surgeons of India*. 2018;51(1):105-6.

Goldberg D, French B, Trotter J, Shetty K, Schiano T, Reddy KR, et al. Underreporting of liver transplant waitlist removals due to death or clinical deterioration: results at four major centers. *Transplantation*. 2013;96(2):211-6.

Golder S, Loke YK. Is there evidence for biased reporting of published adverse effects data in pharmaceutical industry-funded studies? *British journal of clinical pharmacology*. 2008;66(6):767-73.

Goldstein ND, Burstyn I, Newbern EC, Tabb LP, Gutowski J, Welles SL. Bayesian Correction of Misclassification of Pertussis in Vaccine Effectiveness Studies: How Much Does Underreporting Matter? *American journal of epidemiology*. 2016;183(11):1063-70.

Gomez-Bruton A, Arenaza L, Medrano M, Mora-Gonzalez J, Cadenas-Sanchez C, Migueles JH, et al. Associations of dietary energy density with body composition and cardiometabolic risk in children with overweight and obesity: role of energy density calculations, under-reporting energy intake and physical activity. *The British journal of nutrition*. 2019;121(9):1057-68.

Gonzalez-Rubio F, Calderon-Larranaga A, Poblador-Plou B, Navarro-Peman C, Lopez-Cabanas A, Prados-Torres A. Underreporting of recognized adverse drug reactions by primary care physicians: an exploratory study. *Pharmacoepidemiology and drug safety*. 2011;20(12):1287-94.

Goodgame B, Shaheen NJ, Galanko J, El-Serag HB. The risk of end stage liver disease and hepatocellular carcinoma among persons infected with hepatitis C virus: publication bias? *The American journal of gastroenterology*. 2003;98(11):2535-42.

Goodkind D. Child underreporting, fertility, and sex ratio imbalance in China. *Demography*. 2011;48(1):291-316.

Goodkind DM. China's missing children: the 2000 census underreporting surprise. *Population studies*. 2004;58(3):281-95.

Gopalakrishnan N. Snake Envenomingâ€™€An Underreported Cause of Acute Kidney Injury. *Kidney international reports*. 2019;4(5):643-6.

Goren AI. Reporting bias related to an environmental hazard. *Journal of exposure analysis and environmental epidemiology*. 1993;3 Suppl 1:211-27.

Gori GB, Lynch CJ. Decline of U.S. cancer mortality rates: expert estimates of past underreporting. *Regulatory toxicology and pharmacology : RTP*. 1986;6(3):261-73.

Goris AH, Meijer EP, Westerterp KR. Repeated measurement of habitual food intake increases under-reporting and induces selective under-reporting. *The British journal of nutrition*. 2001;85(5):629-34.

Goris AH, Westerterp KR. Underreporting of habitual food intake is explained by undereating in highly motivated lean women. *The Journal of nutrition*. 1999;129(4):878-82.

Goris AH, Westerterp-Plantenga MS, Westerterp KR. Undereating and underrecording of habitual food intake in obese men: selective underreporting of fat intake. *The American journal of clinical nutrition*. 2000;71(1):130-4.

Gotlib Conn L, Nathens AB, Perrier L, Haas B, Watamaniuk A, Daniel Pereira D, et al. What is the quality of reporting on guideline, protocol or algorithm implementation in adult trauma centres? Protocol for a systematic review. *BMJ open*. 2018;8(5):e021750.

Gotlib Conn L, Nathens AB, Perrier L, Haas B, Watamaniuk A, Daniel Pereira D, et al. Quality of Reporting on Guideline, Protocol, or Algorithm Implementation in Adult Trauma Centers: A Systematic Review. *Annals of surgery*. 2019.

Graham H, Owen L. Are there socioeconomic differentials in under-reporting of smoking in pregnancy? *Tobacco control*. 2003;12(4):434.

Grant S, Booth M, Khodyakov D. Lack of preregistered analysis plans allows unacceptable data mining for and selective reporting of consensus in Delphi studies. *Journal of clinical epidemiology*. 2018;99:96-105.

Gravseth HM, Wergeland E, Lund J. Underreporting of occupational injuries to the Labour Inspection. *Tidsskrift for den Norske laegeforening : tidsskrift for praktisk medicin, ny raekke*. 2003;123(15):2057-9.

Graziani F, Figuero E, Herrera D. Systematic review of quality of reporting, outcome measurements and methods to study efficacy of preventive and therapeutic approaches to peri-implant diseases. *Journal of clinical periodontology*. 2012;39 Suppl 12:224-44.

Greenwald RM, Chu JJ, Beckwith JG, Crisco JJ. A proposed method to reduce underreporting of brain injury in sports. *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*. 2012;22(2):83-5.

Grellety T, Petit-Moneger A, Diallo A, Mathoulin-Pelissier S, Italiano A. Quality of reporting of phase II trials: a focus on highly ranked oncology journals. *Annals of oncology : official journal of the European Society for Medical Oncology*. 2014;25(2):536-41.

Griebbling TL. Re: Chronic diseases in elderly men: underreporting and underdiagnosis. *The Journal of urology*. 2012;188(5):1887.

Griffin SO, Jones K. Quality of reporting in economic evaluations of interventions to prevent dental caries needs improvement. *The journal of evidence-based dental practice*. 2013;13(3):109-10.

Grob ATM, van der Vaart LR, Withagen MIJ, van der Vaart CH. Quality of reporting of diagnostic accuracy studies on pelvic floor three-dimensional transperineal ultrasound: a systematic review. *Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology*. 2017;50(4):451-7.

Groenwold RHH, Van Deursen AMM, Hoes AW, Hak E. Poor quality of reporting confounding bias in observational intervention studies: a systematic review. *Annals of epidemiology*. 2008;18(10):746-51.

Gross R, Bentur N, Elhayany A, Sherf M, Epstein L. The validity of self-reports on chronic disease: characteristics of underreporters and implications for the planning of services. *Public health reviews*. 1996;24(2):167-82.

Gu H, Luck S, Carroll PV, Powrie J, Chambers J. Cardiac valve disease and low-dose dopamine agonist therapy: an artefact of reporting bias? *Clinical endocrinology*. 2011;74(5):608-10.

Guan M, Vandekerckhove J. A Bayesian approach to mitigation of publication bias. *Psychonomic bulletin & review*. 2016;23(1):74-86.

Guigne F, Duke P, Rourke L. Is vitamin D deficiency an underreported issue in refugee health?: two cases of infants presenting with vitamin D-deficiency rickets. *Canadian family physician Medecin de famille canadien*. 2013;59(6):641-3.

Gulin JEN, Rocco DM, Garcia-Bournissen F. Quality of Reporting and Adherence to ARRIVE Guidelines in Animal Studies for Chagas Disease Preclinical Drug Research: A Systematic Review. *PLoS neglected tropical diseases*. 2015;9(11):e0004194.

Gummeson C, Atroshi I, Ekdahl C. The quality of reporting and outcome measures in randomized clinical trials related to upper-extremity disorders. *The Journal of hand surgery*. 2004;29(4):727-34; discussion 35-7.

Gundogan B, Agha RA. How Can We Address the Publication Bias Against Negative Scientific Study Data? *Toxicologic pathology*. 2016;44(6):917.

Guo J-W, Sward KA, Beck SL, Staggers N. Quality of reporting randomized controlled trials in cancer nursing research. *Nursing research*. 2014;63(1):26-35.

Guo K, Yin P, Wang L, Ji Y, Li Q, Bishai D, et al. Propensity score weighting for addressing under-reporting in mortality surveillance: a proof-of-concept study using the nationally representative mortality data in China. *Population health metrics*. 2015;13:16.

Gupta D, Bzeih R, Osta W. Minimal/underreported but definite risk of death/bodily harm threats (DBHTs) to pain practitioners: results of nationwide survey from United States. *Middle East journal of anaesthesiology*. 2013;22(3):317-26.

Gupta S. Agomelatine - is it another reboxetine? Another case of publication bias. *Psychiatric bulletin* (2014). 2014;38(2):88.

Guth U, Ella WA, Olaitan A, Hadwin RJ, Arora R, McCormack M. Total vaginal necrosis: a representative example of underreporting severe late toxic reaction after concomitant chemoradiation for cervical cancer. *International journal of gynecological cancer : official journal of the International Gynecological Cancer Society*. 2010;20(1):54-60.

Guth U, Huang DJ, Schotzau A, Dirnhofer S, Wight E, Singer G. Breast cancer with non-inflammatory skin involvement: current data on an underreported entity and its problematic classification. *Breast (Edinburgh, Scotland)*. 2010;19(1):59-64.

Guyatt GH, Oxman AD, Montori V, Vist G, Kunz R, Brozek J, et al. GRADE guidelines: 5. Rating the quality of evidence--publication bias. *Journal of clinical epidemiology*. 2011;64(12):1277-82.

Hadi MA, McHugh GA, Conaghan PG. Quality of reporting of harms in randomised controlled trials of pharmacological interventions for rheumatoid arthritis: a systematic review. *Evidence-based medicine*. 2017;22(5):170-7.

Hadinegoro SRS, Arredondo-Garcia JL, Capeding MR, Pallardy S, Noriega F, Bouckennooghe A. Controversy and debate on dengue vaccine series-paper 2: response to review of a licensed dengue vaccine: inappropriate subgroup analyses and selective reporting may cause harm in mass vaccination programs. *Journal of clinical epidemiology*. 2018;95:140-1.

Hahn S, Williamson PR, Hutton JL, Garner P, Flynn EV. Assessing the potential for bias in meta-analysis due to selective reporting of subgroup analyses within studies. *Statistics in medicine*. 2000;19(24):3325-36.

Hahn S, Williamson PR, Hutton JL. Investigation of within-study selective reporting in clinical research: follow-up of applications submitted to a local research ethics committee. *Journal of evaluation in clinical practice*. 2002;8(3):353-9.

Haidich AB, Birtsou C, Dardavessis T, Tirodimos I, Arvanitidou M. The quality of safety reporting in trials is still suboptimal: Survey of major general medical

journals. *Journal of Clinical Epidemiology*. 64:2. 124-135. DOI: 10.1016/j.jclinepi.2010.03.005. 2011.

Hainaux B, Agneessens E, Rubesova E, Muls V, Gaudissart Q, Moschopoulos C, et al. Intragastric band erosion after laparoscopic adjustable gastric banding for morbid obesity: imaging characteristics of an underreported complication. *AJR American journal of roentgenology*. 2005;184(1):109-12.

Hakansson C, Torisson G, Londos E, Hansson O, van Westen D. Structural imaging findings on non-enhanced computed tomography are severely underreported in the primary care diagnostic work-up of subjective cognitive decline. *Neuroradiology*. 2019;61(4):397-404.

Hall R, de Antueno C, Webber A, Canadian Research Ethics B. Publication bias in the medical literature: a review by a Canadian Research Ethics Board. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. 2007;54(5):380-8.

Hamilton EC, Pham DH, Minzenmayer AN, Austin MT, Lally KP, Tsao K, et al. Are we missing the near misses in the OR?-underreporting of safety incidents in pediatric surgery. *The Journal of surgical research*. 2018;221:336-42.

Hamory BH. Error: percent in "underreporting of needlestick injuries" was "underreported". *American journal of infection control*. 1984;12(1):68.

Hamory BH. Underreporting of needlestick injuries in a university hospital. *American journal of infection control*. 1983;11(5):174-7.

Hampton J. Therapeutic fashion and publication bias: the case of anti-arrhythmic drugs in heart attack. *Journal of the Royal Society of Medicine*. 2015;108(10):418-20.

Hamvas A, Kwong P, DeBaun M, Schramm W, Cole FS. Hyaline membrane disease is underreported in a linked birth-infant death certificate database. *American journal of public health*. 1998;88(9):1387-9.

Han S, Olonisakin TF, Pribis JP, Zupetic J, Yoon JH, Holleran KM, et al. A checklist is associated with increased quality of reporting preclinical biomedical research: A systematic review. *PloS one*. 2017;12(9):e0183591.

Hansen HS, Sosted H. Hand eczema in Copenhagen hairdressers--prevalence and under-reporting to occupational registers. Contact dermatitis. 2009;61(6):361-3.

Hanzlick R. Death certificates, natural death, and alcohol. The problem of underreporting. The American journal of forensic medicine and pathology. 1988;9(2):149-50.

Hardwick L, James R. Domestic abuse--an underreported problem in general dental practice? Dental update. 2013;40(7):550-2, 4.

Hare ME, Sherrill-Mittleman D, Klesges RC, Lancot JQ, Klesges LM. Energy underreporting in African-American girls: a longitudinal analysis. Childhood obesity (Print). 2012;8(6):551-60.

Harewood GC. Assessment of publication bias in the reporting of EUS performance in staging rectal cancer. The American journal of gastroenterology. 2005;100(4):808-16.

Harkness M. Minimizing publication bias. Australian orthodontic journal. 2003;19(1):1A-2A.

Harkness M. Minimizing publication bias. Australian orthodontic journal. 2017;Spec No:22-3.

Harris IA, Mourad M, Kadir A, Solomon MJ, Young JM. Publication bias in abstracts presented to the annual meeting of the American Academy of Orthopaedic Surgeons. Journal of orthopaedic surgery (Hong Kong). 2007;15(1):62-6.

Harris IA, Mourad MS, Kadir A, Solomon MJ, Young JM. Publication bias in papers presented to the Australian Orthopaedic Association Annual Scientific Meeting. ANZ journal of surgery. 2006;76(6):427-31.

Harris P, Takeda A, Loveman E, Hartwell D. Time to full publication of studies of anticancer drugs for breast cancer, and the potential for publication bias. International journal of technology assessment in health care. 2010;26(1):110-6.

Harris RB, Koch SM, Newton C, Silvis NG, Curiel-Lewandroski C, Giancola J, et al. Underreporting of Melanoma in Arizona and Strategies for Increasing

Reporting: A Public Health Partnership Approach. Public health reports (Washington, DC : 1974). 2015;130(6):737-44.

Harrison GG, Galal OM, Ibrahim N, Khorshid A, Stormer A, Leslie J, et al. Underreporting of food intake by dietary recall is not universal: a comparison of data from egyptian and american women. The Journal of nutrition. 2000;130(8):2049-54.

Harrison JE. Clinical trials in orthodontics II: assessment of the quality of reporting of clinical trials published in three orthodontic journals between 1989 and 1998. Journal of orthodontics. 2003;30(4):309-15; discussion 297-8.

Hart B, Lundh A, Bero L. Effect of reporting bias on meta-analyses of drug trials: reanalysis of meta-analyses. BMJ (Clinical research ed). 2012;344:d7202.

Hart KE, Fiissel DL, McAleer M. Do adult offspring of alcoholics suffer from poor medical health? A three-group comparison controlling for self-report bias. The Canadian journal of nursing research = Revue canadienne de recherche en sciences infirmieres. 2003;35(1):53-72.

Hart WA. Care of suicidal prisoners. Deliberate self harm is underreported. BMJ (Clinical research ed). 1993;307(6907):805.

Hartman WR, Arendt KW, Rehfeldt KH. An underreported consequence of obesity in pregnancy: patient-prosthesis mismatch. Case reports in obstetrics and gynecology. 2012;2012:918352.

Hassel M, Asbjornslett BE, Hole LP. Underreporting of maritime accidents to vessel accident databases. Accident; analysis and prevention. 2011;43(6):2053-63.

Hattori A, Sturm R. The obesity epidemic and changes in self-report biases in BMI. Obesity (Silver Spring, Md). 2013;21(4):856-60.

Hattori S, Zhou X-H. Sensitivity analysis for publication bias in meta-analysis of diagnostic studies for a continuous biomarker. Statistics in medicine. 2018;37(3):327-42.

Hauch O. Excess Ticagrelor Mortality: Reporting Bias or a Canary in the Coal Mine? The American journal of medicine. 2017;130(8):e351.

Hay S. Variables in under-reporting of clefts on birth certificates. Public health reports (Washington, DC : 1896). 1967;82(11):985-93.

Hayashi PH, Fontana RJ, Chalasani NP, Stolz AA, Talwalkar JA, Navarro VJ, et al. Under-reporting and Poor Adherence to Monitoring Guidelines for Severe Cases of Isoniazid Hepatotoxicity. Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association. 2015;13(9):1676-82.e1.

Hayashino Y, Noguchi Y, Fukui T. Systematic evaluation and comparison of statistical tests for publication bias. Journal of epidemiology. 2005;15(6):235-43.

Hazell L, Shakir SAW. Under-reporting of adverse drug reactions : a systematic review. Drug safety. 2006;29(5):385-96.

Heavener T, Vassar M. A review of publication bias in the gastroenterology literature. Indian journal of gastroenterology : official journal of the Indian Society of Gastroenterology. 2018;37(1):58-62.

Hedin RJ, Umberham BA, Detweiler BN, Kollmorgen L, Vassar M. Publication Bias and Nonreporting Found in Majority of Systematic Reviews and Meta-analyses in Anesthesiology Journals. Anesthesia and analgesia. 2016;123(4):1018-25.

Heerstrass DW, Ocke MC, Bueno-de-Mesquita HB, Peeters PH, Seidell JC. Underreporting of energy, protein and potassium intake in relation to body mass index. International journal of epidemiology. 1998;27(2):186-93.

Heijl A. On a mission from God: fighting publication bias. Acta ophthalmologica Scandinavica. 2002;80(2):123-4.

Heitmann BL, Lissner L. Can adverse effects of dietary fat intake be overestimated as a consequence of dietary fat underreporting? Public health nutrition. 2005;8(8):1322-7.

Heitmann BL, Lissner L. Dietary underreporting by obese individuals--is it specific or non-specific? BMJ (Clinical research ed). 1995;311(7011):986-9.

Heleno B, Thomsen MF, Rodrigues DS, Jorgensen KJ, Brodersen J. Quantification of harms in cancer screening trials: literature review. *BMJ-British Medical Journal*. 347. Article Number: f5334. DOI: 10.1136/bmj.f5334. 2013.

Hemila H. Publication bias in meta-analysis of ascorbic acid for postoperative atrial fibrillation. *American journal of health-system pharmacy : AJHP : official journal of the American Society of Health-System Pharmacists*. 2017;74(6):372-3.

Hemkens LG, Grouven U, Bender R, Sawicki PT. Insufficient evaluation of adverse events is not a proof of safety. *Diabetologia*. 53:4. 790-792. DOI: 10.1007/s00125-009-1654-7. 2010.

Hendrickson S, Mattes R. Financial incentive for diet recall accuracy does not affect reported energy intake or number of underreporters in a sample of overweight females. *Journal of the American Dietetic Association*. 2007;107(1):118-21.

Hendriksma M, Joosten MHMA, Peters JPM, Grolman W, Stegeman I. Evaluation of the Quality of Reporting of Observational Studies in Otorhinolaryngology - Based on the STROBE Statement. *PloS one*. 2017;12(1):e0169316.

Heneghan C, Thompson M. Don't underestimate the extent of under-reporting. *BMJ (Clinical research ed)*. 2013;346:f639.

Henmi M, Copas JB, Eguchi S. Confidence intervals and P-values for meta-analysis with publication bias. *Biometrics*. 2007;63(2):475-82.

Henmi M, Copas JB. Confidence intervals for random effects meta-analysis and robustness to publication bias. *Statistics in medicine*. 2010;29(29):2969-83.

Hensrud DD, Engle DD, Scheitel SM. Underreporting the use of dietary supplements and nonprescription medications among patients undergoing a periodic health examination. *Mayo Clinic proceedings*. 1999;74(5):443-7.

Herbert V. Underreporting of dietary supplements to health-care providers does great harm. *Mayo Clinic proceedings*. 1999;74(5):531-2.

Hereford TE, Cryar KA, Edwards PK, Siegel ER, Barnes CL, Mears SC. Patients With Hip or Knee Arthritis Underreport Narcotic Usage. *The Journal of arthroplasty*. 2018;33(10):3113-7.

Hernandez B, Ramirez-Villalobos D, Duarte MB, Corcho A, Villarreal G, Jimenez A, et al. Underreporting of deaths in children and birth certification in a representative sample of the 101 municipalities with lowest human development index in Mexico. *Salud publica de Mexico*. 2012;54(4):393-400.

Herrmann D, Sinnott P, Holmes J, Khan S, Koller C, Vassar M. Statistical controversies in clinical research: publication bias evaluations are not routinely conducted in clinical oncology systematic reviews. *Annals of oncology : official journal of the European Society for Medical Oncology*. 2017;28(5):931-7.

Hertz-Picciotto I, Swan SH, Neutra RR. Reporting bias and mode of interview in a study of adverse pregnancy outcomes and water consumption. *Epidemiology (Cambridge, Mass)*. 1992;3(2):104-12.

Heuring E, Chen SC. Melanoma underreporting among US dermatopathologists: A pilot study. *Journal of cutaneous pathology*. 2018;45(7):550-1.

Hickisch R, Hodgetts T, Johnson PJ, Sillero-Zubiri C, Tockner K, Macdonald DW. Effects of publication bias on conservation planning. *Conservation biology : the journal of the Society for Conservation Biology*. 2019.

Hickman M, Aldous J, Gazzard B, Ellam A. AIDS surveillance: a direct assessment of under-reporting. *AIDS (London, England)*. 1993;7(12):1661-5.

Higami Y, Higuchi A, Takahama M, Yamakawa M, Makimoto K. Pattern of underreporting falls in a general psychiatric hospital in Japan. *Perspectives in psychiatric care*. 2013;49(4):255-61.

Higgins JP, Laing ST, Chen Z. Media reporting bias affects reported sudden death rates. *Journal of the American College of Cardiology*. 2011;58(9):990-1; author reply 1-2.

High K, Moore A. Unknown, unrecognized, and underreported: flicker vertigo in helicopter emergency medical services. *Air medical journal*. 2012;31(3):129-30.

Higuchi A, Higami Y, Takahama M, Yamakawa M, Makimoto K. Potential underreporting of medication errors in a psychiatric general hospital in Japan. *International journal of nursing practice*. 2015;21 Suppl 2:2-8.

Hill CL, Buchbinder R, Osborne R. Quality of reporting of randomized clinical trials in abstracts of the 2005 annual meeting of the American College of Rheumatology. *The Journal of rheumatology*. 2007;34(12):2476-80.

Hinds AM, Sajobi TT, Sebille V, Sawatzky R, Lix LM. A systematic review of the quality of reporting of simulation studies about methods for the analysis of complex longitudinal patient-reported outcomes data. *Quality of life research : an international journal of quality of life aspects of treatment, care and rehabilitation*. 2018;27(10):2507-16.

Hirvonen T, Mannisto S, Roos E, Pietinen P. Increasing prevalence of underreporting does not necessarily distort dietary surveys. *European journal of clinical nutrition*. 1997;51(5):297-301.

Hirvonen T, Sinkko H, Hallikainen A, Kiviranta H, Pietinen P, Valsta L, et al. Modelling the intake of polychlorinated dibenzo-p-dioxins and dibenzofurans: impact of energy under-reporting and number of reporting days in dietary surveys. *Food additives & contaminants Part A, Chemistry, analysis, control, exposure & risk assessment*. 2010;27(8):1170-6.

Hjern B, Raf L. Underreporting according to the Lex Maria. *Lakartidningen*. 2001;98(46):5242.

Hoffman GJ, Ha J, Alexander NB, Langa KM, Tinetti M, Min LC. Underreporting of Fall Injuries of Older Adults: Implications for Wellness Visit Fall Risk Screening. *Journal of the American Geriatrics Society*. 2018;66(6):1195-200.

Holleccek B, Brenner H. Implications from Under-reporting at Lifetime, Death Certificate Notifications and Trace-back on the Recorded Incidence of a "Newly" Established Population-based Cancer Registry. *Methods of information in medicine*. 2016;55(2):182-92.

Holming K, Nilsson G, Dovas L, Tornberg G. Hemorrhagic complications of anticoagulation therapy. Avoid underreporting! Check registries! *Lakartidningen*. 1996;93(22):2134-6.

Holroyd J, Bouhoutsos JC. Biased reporting of therapist-patient sexual intimacy. *Professional psychology, research and practice*. 1985;16(5):701-9.

Hong SJ, Park YS, An H, Kang SM, Cho EH, Shin SS. Factors leading to under-reporting of tuberculosis in the private sector in Korea. *The international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease*. 2012;16(9):1221-7.

Hong Y, Fang X, Zhou Y, Zhao R, Li X. Factors associated with sexually transmitted infection underreporting among female sex workers in China. *Journal of women's health (2002)*. 2011;20(1):129-36.

Hook EB. Normal or affected controls in case-control studies of congenital malformations and other birth defects: reporting bias issues. *Epidemiology (Cambridge, Mass)*. 1993;4(2):182-4.

Hopewell S, Loudon K, Clarke MJ, Oxman AD, Dickersin K. Publication bias in clinical trials due to statistical significance or direction of trial results. *The Cochrane database of systematic reviews*. 2009(1):MR000006.

Hopkins WG, Batterham AM. Erratum to: Error Rates, Decisive Outcomes and Publication Bias with Several Inferential Methods. *Sports medicine (Auckland, NZ)*. 2016;46(6):923.

Hopkins WG, Batterham AM. Error Rates, Decisive Outcomes and Publication Bias with Several Inferential Methods. *Sports medicine (Auckland, NZ)*. 2016;46(10):1563-73.

Hopp L. Risk of bias reporting in Cochrane systematic reviews. *International journal of nursing practice*. 2015;21(5):683-6.

Hormes JM, Gerhardstein KR, Griffin PT. Under-reporting of alcohol and substance use versus other psychiatric symptoms in individuals living with HIV. *AIDS care*. 2012;24(4):420-3.

Horon IL, Cheng D. Underreporting of pregnancy-associated deaths. *American journal of public health*. 2005;95(11):1879; author reply -80.

Horon IL. Underreporting of maternal deaths on death certificates and the magnitude of the problem of maternal mortality. *American journal of public health*. 2005;95(3):478-82.

Horowitz H. Reporting biases for hospital-acquired infections. *The American journal of medicine*. 2013;126(3):e27.

Horta BL, Victora CG. Author's response to suggestion of publication bias in a recent meta-analysis on breastfeeding and intelligence quotient. *Acta paediatrica (Oslo, Norway : 1992)*. 2017;106(2):346.

Howard B, Scott JT, Blubaugh M, Roepke B, Scheckel C, Vassar M. Systematic review: Outcome reporting bias is a problem in high impact factor neurology journals. *PloS one*. 2017;12(7):e0180986.

Howe HL, Hoff MB. Breast self-examination and breast cancer: a note on postdisease reporting bias. *Cancer detection and prevention*. 1983;6(4-5):473-83.

Howlader N, Ries LA, Stinchcomb DG, Edwards BK. The impact of underreported Veterans Affairs data on national cancer statistics: analysis using population-based SEER registries. *Journal of the National Cancer Institute*. 2009;101(7):533-6.

Howland RH. Publication bias and outcome reporting bias: agomelatine as a case example. *Journal of psychosocial nursing and mental health services*. 2011;49(9):11-4.

Howland RH. What you see depends on where you're looking and how you look at it: publication bias and outcome reporting bias. *Journal of psychosocial nursing and mental health services*. 2011;49(8):13-5.

Hrachovec J. Publication bias with cetirizine in atopic dermatitis: safe but ineffective? *The Journal of allergy and clinical immunology*. 2002;110(5):818; author reply

Hrobjartsson A, Chan A-W, Haahr MT, Gotzsche PC, Altman DG. Selective reporting of positive outcomes in randomised trials--secondary publication.. *A*

comparison of protocols with published reports. *Ugeskrift for laeger*. 2005;167(34):3189-91.

Hsia CC, Zurawska JH, Tong MZY, Eckert K, McAlister VC, Chin-Yee IH. Recombinant activated factor VII in the treatment of non-haemophilia patients: physician under-reporting of thromboembolic adverse events. *Transfusion medicine* (Oxford, England). 2009;19(1):43-9.

Hsieh Y-H, Kuo M-J, Hsieh T-C, Lee H-C. Underreporting and underestimation of gonorrhea cases in the Taiwan National Gonorrhea Notifiable Disease System in the Tainan region: evaluation by a pilot physician-based sentinel surveillance on *Neisseria gonorrhoeae* infection. *International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases*. 2009;13(6):e413-9.

Hsieh YH, Ruan Y, Chen CWS, Shi W, Li D, Luo F, et al. HIV prevalence and underreporting of men who have sex with men in Beijing. *International journal of STD & AIDS*. 2012;23(8):606-7.

Hu M, Gremel GW, Kirlin JA, West BT. Nonresponse and Underreporting Errors Increase over the Data Collection Week Based on Paradata from the National Household Food Acquisition and Purchase Survey. *The Journal of nutrition*. 2017;147(5):964-75.

Huan LN, Tejani AM, Egan G. Biomedical journals lack a consistent method to detect outcome reporting bias: a cross-sectional analysis. *Journal of clinical pharmacy and therapeutics*. 2014;39(5):501-6.

Huang SF, Zhu Y, Lin XQ, Chen TH, Ye Y, Zhong WL, et al. Estimation of underreporting rate of death cases in disease surveillance system of Fujian province using propensity score weighting method, 2012-2014. *Zhonghua liu xing bing xue za zhi = Zhonghua liuxingbingxue zazhi*. 2016;37(11):1476-9.

Hubosky SG, Raval AJ, Bagley DH. Locked Deflection During Flexible Ureteroscopy: Incidence and Elucidation of the Mechanism of an Underreported Complication. *Journal of endourology*. 2015;29(8):907-12.

Hudson BF, Oostendorp LJ, Candy B, Vickerstaff V, Jones L, Lakhanpaul M, et al. The under reporting of recruitment strategies in research with children with life-threatening illnesses: A systematic review. *Palliative medicine*. 2017;31(5):419-36.

Huebner M, Therneau T, Larson D. Estimating underreported N2 disease in rectal cancer patients with low lymph node counts. *Journal of surgical oncology*. 2012;106(3):248-53.

Hughes R. Underreported flash flood. *Disasters*. 1982;6(1):77.

Hughes S, Cohen D, Jaggi R. Differences in reporting serious adverse events in industry sponsored clinical trial registries and journal articles on antidepressant and antipsychotic drugs: a cross-sectional study. *BMJ Open*. 4:7. Article Number: e005535. DOI: 10.1136/bmjopen-2014-005535. 2014.

Huic M, Marusic M, Marusic A. Completeness and changes in registered data and reporting bias of randomized controlled trials in ICMJE journals after trial registration policy. *PloS one*. 2011;6(9):e25258.

Hull BP, Lawrence GL, MacIntyre CR, McIntyre PB. Immunisation coverage in Australia corrected for under-reporting to the Australian Childhood Immunisation Register. *Australian and New Zealand journal of public health*. 2003;27(5):533-8.

Hunt M, Auriemma J, Cashaw ACA. Self-report bias and underreporting of depression on the BDI-II. *Journal of personality assessment*. 2003;80(1):26-30.

Hunter JP, Saratzis A, Sutton AJ, Boucher RH, Sayers RD, Bown MJ. In meta-analyses of proportion studies, funnel plots were found to be an inaccurate method of assessing publication bias. *Journal of clinical epidemiology*. 2014;67(8):897-903.

Hurley EA, Harvey SA, Rao N, Diarra NH, Klein MC, Diop SI, et al. Underreporting and Missed Opportunities for Uptake of Intermittent Preventative Treatment of Malaria in Pregnancy (IPTp) in Mali. *PloS one*. 2016;11(8):e0160008.

Hurst D. Quality of reporting randomised controlled trials in major dental journals suboptimal. *Evidence-based dentistry*. 2011;12(2):52-3.

Hutton B, Salanti G, Chaimani A, Caldwell DM, Schmid C, Thorlund K, et al. The quality of reporting methods and results in network meta-analyses: an overview of reviews and suggestions for improvement. *PloS one*. 2014;9(3):e92508.

Huwiler-Muntener K, Juni P, Junker C, Egger M. Quality of reporting of randomized trials as a measure of methodologic quality. *Jama*. 2002;287(21):2801-4.

Hwang H, DeSantis SM. Multivariate network meta-analysis to mitigate the effects of outcome reporting bias. *Statistics in medicine*. 2018;37(22):3254-66.

Imam MA, Barke S, Stafford GH, Parkin D, Field RE. Loss to follow-up after total hip replacement: a source of bias in patient reported outcome measures and registry datasets? *Hip international: The Journal of Clinical and Experimental Research on Hip Pathology and Therapy*. 24:5. 465-72. 2014.

Ingre M, Nilsson G. Estimating statistical power, posterior probability and publication bias of psychological research using the observed replication rate. *Royal Society open science*. 2018;5(9):181190.

Inman WH. Under-reporting of adverse drug reactions. *British medical journal (Clinical research ed)*. 1985;290(6478):1355.

Ioannidis JP, Caplan AL, Dal-Re R. Outcome reporting bias in clinical trials: why monitoring matters. *BMJ (Clinical research ed)*. 2017;356:j408.

Ioannidis JPA, Munafo MR, Fusar-Poli P, Nosek BA, David SP. Publication and other reporting biases in cognitive sciences: detection, prevalence, and prevention. *Trends in cognitive sciences*. 2014;18(5):235-41.

Ioannidis JPA, Trikalinos TA. The appropriateness of asymmetry tests for publication bias in meta-analyses: a large survey. *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*. 2007;176(8):1091-6.

Iraor DO. Under-reporting of gossypiboma in a third-world country. A sociocultural view. *Nigerian journal of medicine : journal of the National Association of Resident Doctors of Nigeria*. 2013;22(4):365-7.

Irujo M, Beitia G, Bes-Rastrollo M, Figueiras A, Hernandez-Diaz S, Lasheras B. Factors that influence under-reporting of suspected adverse drug reactions among community pharmacists in a Spanish region. *Drug safety*. 2007;30(11):1073-82.

Isaac A, Saginur M, Hartling L, Robinson JL. Quality of reporting and evidence in American Academy of Pediatrics guidelines. *Pediatrics*. 2013;131(4):732-8.

Ivers NM, Taljaard M, Dixon S, Bennett C, McRae A, Taleban J, et al. Impact of CONSORT extension for cluster randomised trials on quality of reporting and study methodology: review of random sample of 300 trials, 2000-8. *BMJ (Clinical research ed)*. 2011;343:d5886.

Jackson D. Assessing the implications of publication bias for two popular estimates of between-study variance in meta-analysis. *Biometrics*. 2007;63(1):187-93.

Jackson D. Discussion on Quantifying publication bias in meta-analysis. *Biometrics*. 2018;74(3):795-6.

Jackson D. The implications of publication bias for meta-analysis' other parameter. *Statistics in medicine*. 2006;25(17):2911-21.

Jackson R, Beaglehole R. Secular trends in underreporting of cigarette consumption. *American journal of epidemiology*. 1985;122(2):341-4.

Jacobs MS, van Hulst M, Adeoye AM, Tieleman RG, Postma MJ, Owolabi MO. Atrial Fibrillation in Africa-An Underreported and Unrecognized Risk Factor for Stroke: A Systematic Review. *Global heart*. 2019.

Jacobsen BS, Meininger JC. Randomized experiments in nursing: the quality of reporting. *Nursing research*. 1986;35(6):379-82.

Jain AN. Bias, reporting, and sharing: computational evaluations of docking methods. *Journal of computer-aided molecular design*. 2008;22(3-4):201-12.

Jakob A, Whelan J, Kordecki M, Berner R, Stiller B, Arnold R, et al. Kawasaki Disease in Germany: A Prospective, Population-based Study Adjusted for Underreporting. *The Pediatric infectious disease journal*. 2016;35(2):129-34.

Jakobsen AK, Christensen R, Persson R, Bartels EM, Kristensen LE. Open access publishing. And now, e-publication bias. *BMJ (Clinical research ed)*. 2010;340:c2243.

Jancke G, Aljabery F, Gudjonsson S, Hosseini A, Sorenby A, Wiklund P, et al. Port-site Metastases After Robot-assisted Radical Cystectomy: Is There a Publication Bias? *European urology*. 2018;73(4):641-2.

Jancke G, Aljabery F, Gudjonsson S, Sorenby A, Liedberg F. Reply to Francesco Montorsi and Giorgio Gandaglia's Letter to the Editor re: Georg Jancke, Firas Aljabery, Sigurdur Gudjonsson, et al. Port-site Metastases After Robot-assisted Radical Cystectomy: Is There a Publication Bias? *Eur Urol* 2018;73:641-2. *European urology*. 2019;75(2):e32-e3.

Janow GL, Ilowite NT, Wahezi DM. Wasabi nose: an underreported complication of cyclophosphamide infusions. *Clinical rheumatology*. 2011;30(7):1003-5.

Janstrup KH, Kaplan S, Hels T, Lauritsen J, Prato CG. Understanding traffic crash under-reporting: Linking police and medical records to individual and crash characteristics. *Traffic injury prevention*. 2016;17(6):580-4.

Jason J, Andereck ND, Marks J, Tyler CW, Jr. Child abuse in Georgia: a method to evaluate risk factors and reporting bias. *American journal of public health*. 1982;72(12):1353-8.

Jay P, Wallace M. Compulsory registration of clinical trials: under-reporting is not an option. *BMJ (Clinical research ed)*. 2004;329(7473):1044.

Jaykaran, Yadav P. Quality of reporting statistics in two Indian pharmacology journals. *Journal of pharmacology & pharmacotherapeutics*. 2011;2(2):85-9.

Jelastopulu E, Alexopoulos EC, Venieri D, Tsiros G, Komninou G, Constantinidis TC, et al. Substantial underreporting of tuberculosis in West Greece: implications for local and national surveillance. *Euro surveillance : bulletin Europeen sur les maladies transmissibles = European communicable disease bulletin*. 2009;14(11).

Jelastopulu E, Merikoulias G, Alexopoulos EC. Underreporting of communicable diseases in the prefecture of Achaia, western Greece, 1999-2004 - missed opportunities for early intervention. *Euro surveillance : bulletin Europeen sur les*

maladies transmissibles = European communicable disease bulletin. 2010;15(21):19579.

Jennings RG, Van Horn JD. Publication bias in neuroimaging research: implications for meta-analyses. *Neuroinformatics*. 2012;10(1):67-80.

Jennions MD, Moller AP. Publication bias in ecology and evolution: an empirical assessment using the 'trim and fill' method. *Biological reviews of the Cambridge Philosophical Society*. 2002;77(2):211-22.

Jia P, Tang L, Yu J, Liu J, Kang D, Sun X. The quality of reporting in randomized controlled trials of acupuncture for knee osteoarthritis: A cross-sectional survey. *PloS one*. 2018;13(4):e0195652.

Jin Z-C, Wu C, Zhou X-H, He J. A modified regression method to test publication bias in meta-analyses with binary outcomes. *BMC medical research methodology*. 2014;14:132.

Jin Z-C, Zhou X-H, He J. Statistical methods for dealing with publication bias in meta-analysis. *Statistics in medicine*. 2015;34(2):343-60.

Johansson G, Wikman A, Ahren AM, Hallmans G, Johansson I. Underreporting of energy intake in repeated 24-hour recalls related to gender, age, weight status, day of interview, educational level, reported food intake, smoking habits and area of living. *Public health nutrition*. 2001;4(4):919-27.

Johnson A, Thakar R, Sultan AH. Obstetric perineal wound infection: is there underreporting? *British journal of nursing* (Mark Allen Publishing). 2012;21(5):S28, S30, S2-5.

Johnson HP, Agius M. A Post-Traumatic Stress Disorder review: the prevalence of underreporting and the role of stigma in the Military. *Psychiatria Danubina*. 2018;30(Suppl 7):508-10.

Johnson RK, Friedman AB, Harvey-Berino J, Gold BC, McKenzie D. Participation in a behavioral weight-loss program worsens the prevalence and severity of underreporting among obese and overweight women. *Journal of the American Dietetic Association*. 2005;105(12):1948-51.

Johnson RK, Goran MI, Poehlman ET. Correlates of over- and underreporting of energy intake in healthy older men and women. *The American journal of clinical nutrition*. 1994;59(6):1286-90.

Johnson RK, Soultanakis RP, Matthews DE. Literacy and body fatness are associated with underreporting of energy intake in US low-income women using the multiple-pass 24-hour recall: a doubly labeled water study. *Journal of the American Dietetic Association*. 1998;98(10):1136-40.

Johnson RT, Dickersin K. Publication bias against negative results from clinical trials: three of the seven deadly sins. *Nature clinical practice Neurology*. 2007;3(11):590-1.

Johnson S. A quality improvement project to tackle under-reporting of hazards by doctors by using an anonymous telephone hotline. *BMJ quality improvement reports*. 2016;5(1).

Johnson T, Fendrich M. Modeling sources of self-report bias in a survey of drug use epidemiology. *Annals of epidemiology*. 2005;15(5):381-9.

Johnson ZK, Siddiqui MAR, Azuara-Blanco A. The quality of reporting of diagnostic accuracy studies of optical coherence tomography in glaucoma. *Ophthalmology*. 2007;114(9):1607-12.

Jonasson B, Jonasson U, Saldeen T. Suicides may be overreported and accidents underreported among fatalities due to dextropropoxyphene. *Journal of forensic sciences*. 1999;44(2):334-8.

Jones EF, Forrest JD. Underreporting of abortion in surveys of U.S. women: 1976 to 1988. *Demography*. 1992;29(1):113-26.

Jones EL, Williams-Yesson BA, Hackett RC, Staniszewska SH, Evans D, Francis NK. Quality of reporting on patient and public involvement within surgical research: a systematic review. *Annals of surgery*. 2015;261(2):243-50.

Jones JM, Koski L, Khan M, Brady S, Sunenshine R, Komatsu KK. Coccidioidomycosis: An underreported cause of death-Arizona, 2008-2013. *Medical mycology*. 2018;56(2):172-9.

Jones PM. In reply: A two-stage review process for randomized controlled trials: the ultimate solution for publication bias? Canadian journal of anaesthesia = Journal canadien d'anesthesie. 2016;63(12):1383.

Jones PM. Publication bias in the anesthesiology literature: shifting the focus from the "positive" to the "truth". Canadian journal of anaesthesia = Journal canadien d'anesthesie. 2016;63(6):658-63.

Jones RK, Kost K. Underreporting of induced and spontaneous abortion in the United States: an analysis of the 2002 National Survey of Family Growth. Studies in family planning. 2007;38(3):187-97.

Jonnalagadda SS, Benardot D, Dill MN. Assessment of under-reporting of energy intake by elite female gymnast. International journal of sport nutrition and exercise metabolism. 2000;10(3):315-25.

Jonsson PV, Finne-Soveri H, Jensdottir AB, Ljunggren G, Bucht G, Grue EV, et al. Co-morbidity and functional limitation in older patients underreported in medical records in Nordic Acute Care Hospitals when compared with the MDS-AC instrument. Age and ageing. 2006;35(4):434-8.

Joober R, Schmitz N, Annable L, Boksa P. Publication bias: what are the challenges and can they be overcome? Journal of psychiatry & neuroscience : JPN. 2012;37(3):149-52.

Jordan KP, Lewis M. Improving the quality of reporting of research studies. Musculoskeletal care. 2009;7(3):137-42.

Jorgensen L, Gotzsche PC, Jefferson T. Index of the human papillomavirus (HPV) vaccine industry clinical study programmes and non-industry funded studies: a necessary basis to address reporting bias in a systematic review. Systematic reviews. 2018;7(1):8.

Jorgensen P, an der Heiden M, Kern P, Schoneberg I, Krause G, Alpers K. Underreporting of human alveolar echinococcosis, Germany. Emerging infectious diseases. 2008;14(6):935-7.

Jull A, Aye PS. Endorsement of the CONSORT guidelines, trial registration, and the quality of reporting randomised controlled trials in leading nursing journals: A

cross-sectional analysis. *International journal of nursing studies*. 2015;52(6):1071-9.

Jung JJ, Adams-McGavin RC, Grantcharov TP. Underreporting of Veress Needle Injuries: Comparing Direct Observation and Chart Review Methods. *The Journal of surgical research*. 2019;236:266-70.

Jussen L, Lagro-Janssen T, Leenders J, Logie C, Mijdam R. Underreported and unknown student harassment at the Faculty of Science. *PloS one*. 2019;14(4):e0215067.

Juyal D, Yadav D, Sethuraman G, Kumar A, Shende T, Gupta S, et al. Sexual abuse in males: An underreported issue. *Indian journal of sexually transmitted diseases and AIDS*. 2017;38(2):187-8.

Kadar N. Laparoscopic surgery: publication bias and its perils. *American journal of obstetrics and gynecology*. 1995;172(5):1636-7.

Kahan LG, Blatnik JA. Critical Under-Reporting of Hernia Mesh Properties and Development of a Novel Package Label. *Journal of the American College of Surgeons*. 2018;226(2):117-25.

Kajbaf F, Lalau JD. The criteria for metformin-associated lactic acidosis: the quality of reporting in a large pharmacovigilance database. *Diabetic medicine : a journal of the British Diabetic Association*. 2013;30(3):345-8.

Kakkar S, Sharma PK. Benign vulvar vestibular papillomatosis: An underreported condition in Indian dermatological literature. *Indian dermatology online journal*. 2017;8(1):63-5.

Kallewaard M, Algra A, Defauw J, Grobbee D, van der Graaf Y. Likelihood of underreporting of outlet strut fracture from examination of the Dutch Bjork-Shiley CC cohort. *The American journal of cardiology*. 1998;82(6):768-73.

Kanankege KST, Alkhamis MA, Phelps NBD, Perez AM. A Probability Co-Kriging Model to Account for Reporting Bias and Recognize Areas at High Risk for Zebra Mussels and Eurasian Watermilfoil Invasions in Minnesota. *Frontiers in veterinary science*. 2017;4:231.

Kane-Gill SL, Smithburger PL, Williams EA, Felton MA, Wang N, Seybert AL. Published cases of adverse drug reactions: has the quality of reporting improved over time? *Therapeutic advances in drug safety*. 2015;6(2):38-44.

Kao S, Chen LM, Shi L, Weinrich MC. Underreporting and misclassification of maternal mortality in Taiwan. *Acta obstetricia et gynecologica Scandinavica*. 1997;76(7):629-36.

Kaper NM, Swart KMA, Grolman W, Van Der Heijden GJMG. Quality of reporting and risk of bias in therapeutic otolaryngology publications. *The Journal of laryngology and otology*. 2018;132(1):22-8.

Karam EG, Sampson N, Itani L, Andrade LH, Borges G, Chiu WT, et al. Under-reporting bipolar disorder in large-scale epidemiologic studies. *Journal of affective disorders*. 2014;159:147-54.

Karelis AD, Lavoie ME, Fontaine J, Messier V, Strychar I, Rabasa-Lhoret R, et al. Anthropometric, metabolic, dietary and psychosocial profiles of underreporters of energy intake: a doubly labeled water study among overweight/obese postmenopausal women--a Montreal Ottawa New Emerging Team study. *European journal of clinical nutrition*. 2010;64(1):68-74.

Karimian-Teherani D, Haidinger G, Waldhoer T, Beck A, Vutuc C. Under-reporting of direct and indirect obstetrical deaths in Austria, 1980-98. *Acta obstetricia et gynecologica Scandinavica*. 2002;81(4):323-7.

Karpouzis F, Bonello R, Pribicevic M, Kalamir A, Brown BT. Erratum to: Quality of reporting of randomised controlled trials in chiropractic using the CONSORT checklist. *Chiropractic & manual therapies*. 2016;24:36.

Karpouzis F, Bonello R, Pribicevic M, Kalamir A, Brown BT. Quality of reporting of randomised controlled trials in chiropractic using the CONSORT checklist. *Chiropractic & manual therapies*. 2016;24:19.

Karri V. Randomised clinical trials in plastic surgery: survey of output and quality of reporting. *Journal of plastic, reconstructive & aesthetic surgery : JPRAS*. 2006;59(8):787-96.

Karsy M, Brock AA, Rolston JD. Hiding in Plain Sight: Underreporting of Clinical Trial Results in Neurology. *Neurosurgery*. 2018;83(3):E96.

Karthikesalingam A, Bahia SS, Patel SR, Azhar B, Jackson D, Cresswell L, et al. A systematic review and meta-analysis indicates underreporting of renal dysfunction following endovascular aneurysm repair. *Kidney international*. 2015;87(2):442-51.

Kassardjian M, Patel M, Shitabata P, Horowitz D. Congenital self-healing reticulohistiocytosis: an underreported entity. *Cutis*. 2016;97(4):296-300.

Katzenstein D, Fontes LA. Twice Silenced: The Underreporting of Child Sexual Abuse in Orthodox Jewish Communities. *Journal of child sexual abuse*. 2017;26(6):752-67.

Kaufman JL. Publication bias and the editorial process. *Jama*. 1992;267(21):2891; author reply -2.

Kaufman MB. Drug-induced pancreatitis: A Potentially Serious and Underreported Problem. *P & T : a peer-reviewed journal for formulary management*. 2013;38(6):349-51.

Kawachi I, Colditz GA. Invited commentary: confounding, measurement error, and publication bias in studies of passive smoking. *American journal of epidemiology*. 1996;144(10):909-15.

Kayani A, Fleiter JJ, King MJ. Underreporting of road crashes in Pakistan and the role of fate. *Traffic injury prevention*. 2014;15(1):34-9.

Kazerooni PA, Fararouei M, Nejat M, Akbarpoor M, Sedaghat Z. Under-ascertainment, under-reporting and timeliness of Iranian communicable disease surveillance system for zoonotic diseases. *Public health*. 2018;154:130-5.

Kazerooni PA, Nejat M, Akbarpoor M, Sedaghat Z, Fararouei M. Underascertainment, underreporting, representativeness and timeliness of the Iranian communicable disease surveillance system for tuberculosis. *Public health*. 2019;171:50-6.

Keet K. Addressing publication bias in the anatomical literature by reporting zero prevalence of bicuspid aortic valve. *Clinical anatomy* (New York, NY). 2018;31(8):1225-6.

Keifer M, McConnell R, Pacheco AF, Daniel W, Rosenstock L. Estimating underreported pesticide poisonings in Nicaragua. *American journal of industrial medicine*. 1996;30(2):195-201.

Keith BE, Paradise Black NM, Islam S. Two cases of a neonatal interlabial mass presenting within 30 hours of each other: coincidence or underdiagnosed and underreported finding? *Clinical pediatrics*. 2010;49(5):506-8.

Kelly TA, O'Lorcain P, Moran J, Garvey P, McKeown P, Connell J, et al. Underreporting of viral encephalitis and viral meningitis, Ireland, 2005-2008. *Emerging infectious diseases*. 2013;19(9):1428-36.

Kendall MA, Andersen JW, van der Horst C. A reduced frequency visit schedule underreports adverse events that resulted in dose modifications or treatment discontinuations in HIV/AIDS clinical trials: ACTG DACS 207. *Contemporary clinical trials*. 2006;27(3):287-94.

Keranen T, Ylitalo P. Publication bias in the clinical drug research. *Duodecim; laaketieteellinen aikakauskirja*. 1999;115(17):1828-32.

Kessler CS, McGuinn M, Spec A, Christensen J, Baragi R, Hershow RC. Underreporting of blood and body fluid exposures among health care students and trainees in the acute care setting: a 2007 survey. *American journal of infection control*. 2011;39(2):129-34.

Khan SN, Mermer MJ, Myers E, Sandhu HS. The roles of funding source, clinical trial outcome, and quality of reporting in orthopedic surgery literature. *American journal of orthopedics* (Belle Mead, NJ). 2008;37(12):E205-12; discussion E12.

Khanna A, Mansuri S, Mortimore S, De M, Elliott R, Sharp J. Underreporting of mortality from head and neck carcinoma: our experience at a tertiary head and neck cancer unit. *Clinical otolaryngology : official journal of ENT-UK ; official journal of Netherlands Society for Oto-Rhino-Laryngology & Cervico-Facial Surgery*. 2013;38(1):103-4.

Khazaal Y, Rothen S, Moriniere Trombert N, Fresard E, Zullino DF. Dietary underreporting in women with schizophrenia requiring dietary intervention: a case control study. *Eating and weight disorders* : EWD. 2007;12(4):e83-5.

Kicinski M, Springate DA, Kontopantelis E. Publication bias in meta-analyses from the Cochrane Database of Systematic Reviews. *Statistics in medicine*. 2015;34(20):2781-93.

Kicinski M. How does under-reporting of negative and inconclusive results affect the false-positive rate in meta-analysis? A simulation study. *BMJ open*. 2014;4(8):e004831.

Kicinski M. Publication bias in recent meta-analyses. *PloS one*. 2013;8(11):e81823.

Kien C, NuSsbaumer B, Thaler KJ, Griebler U, Van Noord MG, Wagner P, et al. Barriers to and facilitators of interventions to counter publication bias: thematic analysis of scholarly articles and stakeholder interviews. *BMC health services research*. 2014;14:551.

Kilander C, Mattsson F, Ljung R, Lagergren J, Sadr-Azodi O. Systematic underreporting of the population-based incidence of pancreatic and biliary tract cancers. *Acta oncologica (Stockholm, Sweden)*. 2014;53(6):822-9.

Kim DC, Glenzer S, Johnson A, Nimityongskul P. Deep Infection Following Dry Needling in a Young Athlete: An Underreported Complication of an Increasingly Prevalent Modality: A Case Report. *JBJS case connector*. 2018;8(3):e73.

Kim DY, Park HS, Cho S, Yoon HS. The quality of reporting randomized controlled trials in the dermatology literature in an era where the CONSORT statement is a standard. *The British journal of dermatology*. 2018.

Kim EY, Hwang SS-H, Lee NY, Kim SH, Lee HJ, Kim YS, et al. Intelligence, temperament, and personality are related to over- or under-reporting of affective symptoms by patients with euthymic mood disorder. *Journal of affective disorders*. 2013;148(2-3):235-42.

Kim J, Eom Y-J, Lee Y-S, Nam D, Chae Y. The Current Status of Quality of Reporting in Acupuncture Treatment Case Reports: An Analysis of the Core

Journal in Korea. Evidence-based complementary and alternative medicine : eCAM. 2017;2017:5810372.

Kim KH, Kang JW, Lee MS, Lee J-D. Assessment of the quality of reporting for treatment components in Cochrane reviews of acupuncture. BMJ open. 2014;4(1):e004136.

Kim KH, Kang JW, Lee MS, Lee J-D. Assessment of the quality of reporting in randomised controlled trials of acupuncture in the Korean literature using the CONSORT statement and STRICTA guidelines. BMJ open. 2014;4(7):e005068.

Kim MR, Kim MY, Kim SY, Hwang IH, Yoon YJ. The quality of reporting of cohort, case-control studies in the korean journal of family medicine. Korean journal of family medicine. 2012;33(2):79-88.

Kim N, Rowe BH, Raymond G, Jen H, Colman I, Jackson SA, et al. Underreporting of vertebral fractures on routine chest radiography. AJR American journal of roentgenology. 2004;182(2):297-300.

Kimmel SE, Sekeres MA, Berlin JA, Goldberg LR, Strom BL. Adverse events after protamine administration in patients undergoing cardiopulmonary bypass: risks and predictors of under-reporting. Journal of clinical epidemiology. 1998;51(1):1-10.

Kind L, Orsini MdLP, Nepomuceno V, Goncalves L, Souza GAd, Ferreira MFF. Primary healthcare and underreporting and (in)visibility of violence against women. Cadernos de saude publica. 2013;29(9):1805-15.

King BM, Cespedes VM, Burden GK, Brady SK, Clement LR, Abbott EM, et al. Extreme under-reporting of body weight by young adults with obesity: relation to social desirability. Obesity science & practice. 2018;4(2):129-33.

King BM, Marino LE, Barry KR. Does the Centers for Disease Control and Prevention's Youth Risk Behavior Survey Underreport Risky Sexual Behavior? Sexually transmitted diseases. 2018;45(3):e10-e1.

Kirkham JJ, Altman DG, Chan A-W, Gamble C, Dwan KM, Williamson PR. Outcome reporting bias in trials: a methodological approach for assessment and adjustment in systematic reviews. BMJ (Clinical research ed). 2018;362:k3802.

Kirkham JJ, Dwan KM, Altman DG, Gamble C, Dodd S, Smyth R, et al. The impact of outcome reporting bias in randomised controlled trials on a cohort of systematic reviews. *BMJ (Clinical research ed)*. 2010;340:c365.

Kirkham JJ, Riley RD, Williamson PR. A multivariate meta-analysis approach for reducing the impact of outcome reporting bias in systematic reviews. *Statistics in medicine*. 2012;31(20):2179-95.

Kiroff GK. Publication bias in presentations to the Annual Scientific Congress. *ANZ journal of surgery*. 2001;71(3):167-71.

Kirsch TD, Shesser R, Barron M. Disease surveillance in the ED: factors leading to the underreporting of gonorrhea. *The American journal of emergency medicine*. 1998;16(2):137-40.

Kissel M, Phoon CKL, Kahn PJ. Hypertension during intravenous immune globulin infusion for Kawasaki's disease: an underreported phenomenon? *Clinical pediatrics*. 2015;54(5):491-3.

Kittisupamongkol W. Not for your eyes: information concealed through publication bias. *American journal of ophthalmology*. 2009;147(3):558; author reply -9.

Klassen TP, Wiebe N, Russell K, Stevens K, Hartling L, Craig WR, et al. Abstracts of randomized controlled trials presented at the society for pediatric research meeting: an example of publication bias. *Archives of pediatrics & adolescent medicine*. 2002;156(5):474-9.

Klatsky AL, Gunderson EP, Kipp H, Udaltsova N, Friedman GD. Higher prevalence of systemic hypertension among moderate alcohol drinkers: an exploration of the role of underreporting. *Journal of studies on alcohol*. 2006;67(3):421-8.

Klatsky AL, Udaltsova N, Li Y, Baer D, Nicole Tran H, Friedman GD. Moderate alcohol intake and cancer: the role of underreporting. *Cancer causes & control : CCC*. 2014;25(6):693-9.

Klausen H, Iversen L. Notification of occupational injuries from a place of employment: a problem of under-reporting. *Ugeskrift for laeger*. 1979;141(20):1353-7.

Kleijnen J, Knipschild P. Review articles and publication bias. *Arzneimittel-Forschung*. 1992;42(5):587-91.

Klein JS, Yocum MW. Underreporting of anaphylaxis in a community emergency room. *The Journal of allergy and clinical immunology*. 1995;95(2):637-8.

Klein K, Scholl JHG, De Bruin ML, van Puijenbroek EP, Leufkens HGM, Stolk P. When More Is Less: An Exploratory Study of the Precautionary Reporting Bias and Its Impact on Safety Signal Detection. *Clinical pharmacology and therapeutics*. 2018;103(2):296-303.

Kleinman JC. Underreporting of infant deaths: then and now. *American journal of public health*. 1986;76(4):365-6.

Klesges RC, Eck LH, Ray JW. Who underreports dietary intake in a dietary recall? Evidence from the Second National Health and Nutrition Examination Survey. *Journal of consulting and clinical psychology*. 1995;63(3):438-44.

Kmietowicz Z. A fifth of acute trusts may be under-reporting medical errors. *BMJ (Clinical research ed)*. 2014;348:g4257.

Knapczyk FN, Conner JK. Estimates of the average strength of natural selection are not inflated by sampling error or publication bias. *The American naturalist*. 2007;170(4):501-8.

Knobloch K, Yoon U, Rennekampff HO, Vogt PM. Quality of reporting according to the CONSORT, STROBE and Timmer instrument at the American Burn Association (ABA) annual meetings 2000 and 2008. *BMC medical research methodology*. 2011;11:161.

Knobloch K, Yoon U, Vogt PM. Preferred reporting items for systematic reviews and meta-analyses (PRISMA) statement and publication bias. *Journal of cranio-maxillo-facial surgery : official publication of the European Association for Cranio-Maxillo-Facial Surgery*. 2011;39(2):91-2.

Knobloch K, Yoon U, Vogt PM. Quality of reporting in poster versus oral presentations at the American Society of Plastic Surgeons 2008 conference in Chicago. *Plastic and reconstructive surgery*. 2010;125(5):219e-21e.

Knudsen TB, Kristiansen TB. Issues pertaining to data extraction and classification and publication bias in meta-analysis of the diagnostic accuracy of markers for bacterial infection. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. 2005;40(9):1372-3; author reply 3-4.

Ko CJ, Colegio OR, Moss JE, McNiff JM. Fibrillar IgA deposition in dermatitis herpetiformis--an underreported pattern with potential clinical significance. *Journal of cutaneous pathology*. 2010;37(4):475-7.

Ko CJ, McNiff JM. Punctate pemphigus: an underreported direct immunofluorescence pattern. *Journal of cutaneous pathology*. 2014;41(3):293-6.

Ko CJ, McNiff JM. Reply to letter 'Punctate pemphigus: an underreported direct immunofluorescence pattern'. *Journal of cutaneous pathology*. 2014;41(9):758.

Ko CY, Sack J, Chang JT, Fink A. Reporting randomized, controlled trials: where quality of reporting may be improved. *Diseases of the colon and rectum*. 2002;45(4):443-7.

Koh HK, Clapp RW, Barnett JM, Nannery WM, Tahan SR, Geller AC, et al. Systematic underreporting of cutaneous malignant melanoma in Massachusetts. Possible implications for national incidence figures. *Journal of the American Academy of Dermatology*. 1991;24(4):545-50.

Koh HK, Geller A, Miller DR, Clapp RW, Lew RA. Underreporting of cutaneous melanoma in cancer registries nationwide. *Journal of the American Academy of Dermatology*. 1992;27(6 Pt 1):1035-6.

Kojima T, Nakanishi T, Harada R, Ohkubo K, Yamauchi S, Fukuzumi S. Selective inclusion of electron-donating molecules into porphyrin nanochannels derived from the self-assembly of saddle-distorted, protonated porphyrins and photoinduced electron transfer from guest molecules to porphyrin dications. *Chemistry (Weinheim an der Bergstrasse, Germany)*. 2007;13(31):8714-25.

Koletsis D, Valla K, Fleming PS, Chaimani A, Pandis N. Assessment of publication bias required improvement in oral health systematic reviews. *Journal of clinical epidemiology*. 2016;76:118-24.

Kolstad HA, Hansen AM, Kargaard A, Thomsen JF, Kaerlev L, Mikkelsen S, et al. Job strain and the risk of depression: is reporting biased? *American journal of epidemiology*. 2011;173(1):94-102.

Kolstoe SE, Shanahan DR, Wisely J. Should research ethics committees police reporting bias? *BMJ (Clinical research ed)*. 2017;356:j1501.

Konowitz PM, Petrossian GA, Rose DN. The underreporting of disease and physicians' knowledge of reporting requirements. *Public health reports (Washington, DC : 1974)*. 1984;99(1):31-5.

Koog YH, We SR, Min B-I. Three-armed trials including placebo and no-treatment groups may be subject to publication bias: systematic review. *PloS one*. 2011;6(5):e20679.

Kopp IB. Implications of publication bias on guideline development and appraisal. *Zeitschrift fur Evidenz, Fortbildung und Qualitat im Gesundheitswesen*. 2011;105(3):201-6.

Korevaar DA, Hooft L, ter Riet G. Systematic reviews and meta-analyses of preclinical studies: publication bias in laboratory animal experiments. *Laboratory animals*. 2011;45(4):225-30.

Korevaar DA. Re: Quality of reporting of diagnostic accuracy studies on pelvic floor three-dimensional transperineal ultrasound: a systematic review. A. T. M. Grob, L. R. van der Vaart, M. I. J. Withagen and C. H. van der Vaart. *Ultrasound Obstet Gynecol* 2017; 50: 451-457. *Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology*. 2017;50(4):427-8.

Kortzinger I, Bierwag A, Mast M, Muller MJ. Dietary underreporting: validity of dietary measurements of energy intake using a 7-day dietary record and a diet history in non-obese subjects. *Annals of nutrition & metabolism*. 1997;41(1):37-44.

Kotchetkov R, Ellison E, McLean J, Pressnail B, Nay D. Synchronous dual hematological malignancies: new or underreported entity? *Hematology* (Amsterdam, Netherlands). 2018;23(9):596-9.

Kotelchuck D, Murphy D, Younai F. Impact of underreporting on the management of occupational bloodborne exposures in a dental teaching environment. *Journal of dental education*. 2004;68(6):614-22.

Kovalenko AA, Brenn T, Odland JO, Nieboer E, Krettek A, Anda EE. Under-reporting of major birth defects in Northwest Russia: a registry-based study. *International journal of circumpolar health*. 2017;76(1):1366785.

Kozak LJ. Underreporting of race in the National Hospital Discharge Survey. *Advance data*. 1995(265):1-12.

Kragstrup TW, Christensen J, Fejerskov K, Wenzel A. Frey syndrome-an underreported complication to closed treatment of mandibular condyle fracture? Case report and literature review. *Journal of oral and maxillofacial surgery : official journal of the American Association of Oral and Maxillofacial Surgeons*. 2011;69(8):2211-6.

Kranke P. Review of publication bias in studies on publication bias: meta-research on publication bias does not help transfer research results to patient care. *BMJ* (Clinical research ed). 2005;331(7517):638.

Kretsch MJ, Fong AK, Green MW. Behavioral and body size correlates of energy intake underreporting by obese and normal-weight women. *Journal of the American Dietetic Association*. 1999;99(3):300-6; quiz 7-8.

Kroshus E, Garnett B, Hawrilenko M, Baugh CM, Calzo JP. Concussion under-reporting and pressure from coaches, teammates, fans, and parents. *Social science & medicine* (1982). 2015;134:66-75.

Kroshus E, Kubzansky LD, Goldman RE, Austin SB. Norms, athletic identity, and concussion symptom under-reporting among male collegiate ice hockey players: a prospective cohort study. *Annals of behavioral medicine : a publication of the Society of Behavioral Medicine*. 2015;49(1):95-103.

Kruger TB, Sharikabad MN, Herlofson BB. Bisphosphonate-related osteonecrosis of the jaw in four Nordic countries and an indication of under-reporting. *Acta odontologica Scandinavica*. 2013;71(6):1386-90.

Kuetting D, Muller A, Feisst A, Luetkens J, Dabir D, Schild HH, et al. Incidental Cardiac Findings in Non-Electrocardiogram-gated Thoracic Computed Tomography of Intensive Care Unit Patients: Assessment of Prevalence and Underreporting. *Journal of thoracic imaging*. 2018;33(3):168-75.

Kuhberger A, Fritz A, Scherndl T. Publication bias in psychology: a diagnosis based on the correlation between effect size and sample size. *PloS one*. 2014;9(9):e105825.

Kumar S. Factors leading to underreporting or under diagnosis of AIDS. *Tropical doctor*. 2005;35(2):124-5.

Kumaran MS, Narang T, Parsad D. Contact Urticaria With Paraphenylene Diamine, Rare or Underreported? *Skinmed*. 2016;14(5):389-90.

Kunin WE. Publications: No bias behind pollinator research. *Nature*. 2013;502(7471):303.

Kuriyama A. Capsule Commentary on Lin et. al. Empirical Comparison of Publication Bias Tests in Meta-analysis. *Journal of general internal medicine*. 2018;33(8):1382.

Kustec T, Kese D, Klavs I. Under-reporting of sexually transmitted infection with chlamydia trachomatis - a revision of surveillance system is required. *Zdravstveno varstvo*. 2016;55(3):174-8.

Kye S, Kwon S-O, Lee S-Y, Lee J, Kim BH, Suh H-J, et al. Under-reporting of Energy Intake from 24-hour Dietary Recalls in the Korean National Health and Nutrition Examination Survey. *Osong public health and research perspectives*. 2014;5(2):85-91.

Kyrgidis A, Argenziano G, Moscarella E, Longo C, Alfano R, Lallas A. Increased mortality for pregnancy-associated melanoma: different outcomes pooled together, selection and publication biases. *Journal of the European Academy of Dermatology and Venereology : JEADV*. 2016;30(9):1618.

Kyzas PA, Denaxa-Kyza D, Ioannidis JPA. Quality of reporting of cancer prognostic marker studies: association with reported prognostic effect. *Journal of the National Cancer Institute*. 2007;99(3):236-43.

Kyzas PA, Loizou KT, Ioannidis JPA. Selective reporting biases in cancer prognostic factor studies. *Journal of the National Cancer Institute*. 2005;97(14):1043-55.

La Grenade L, Graham DJ, Nourjah P. Underreporting of hemorrhagic stroke associated with phenylpropanolamine. *Jama*. 2001;286(24):3081.

Ladd BO, McCrady BS, Manuel JK, Campbell W. Improving the quality of reporting alcohol outcome studies: effects of the CONSORT statement. *Addictive behaviors*. 2010;35(7):660-6.

Lafay L, Basdevant A, Charles MA, Vray M, Balkau B, Borys JM, et al. Determinants and nature of dietary underreporting in a free-living population: the Fleurbaix Laventie Ville Sante (FLVS) Study. *International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity*. 1997;21(7):567-73.

Lafay L, Mennen L, Basdevant A, Charles MA, Borys JM, Eschwege E, et al. Does energy intake underreporting involve all kinds of food or only specific food items? Results from the Fleurbaix Laventie Ville Sante (FLVS) study. *International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity*. 2000;24(11):1500-6.

Lafeta KRG, Martelli Junior H, Silveira MF, Paranaiba LMR. Maternal and congenital syphilis, underreported and difficult to control. *Revista brasileira de epidemiologia = Brazilian journal of epidemiology*. 2016;19(1):63-74.

Lai T, Kao G. Hit, Robbed, and Put Down (but not Bullied): Underreporting of Bullying by Minority and Male Students. *Journal of youth and adolescence*. 2018;47(3):619-35.

Lai TYY, Wong VWY, Lam RF, Cheng ACO, Lam DSC, Leung GM. Quality of reporting of key methodological items of randomized controlled trials in clinical ophthalmic journals. *Ophthalmic epidemiology*. 2007;14(6):390-8.

Lancee M, Lemmens CMC, Kahn RS, Vinkers CH, Luykx JJ. Outcome reporting bias in randomized-controlled trials investigating antipsychotic drugs. *Translational psychiatry*. 2017;7(9):e1232.

Lanctot JQ, Klesges RC, Stockton MB, Klesges LM. Prevalence and characteristics of energy underreporting in African-American girls. *Obesity (Silver Spring, Md)*. 2008;16(6):1407-12.

Land TG, Landau AS, Manning SE, Purtill JK, Pickett K, Wakschlag L, et al. Who underreports smoking on birth records: a Monte Carlo predictive model with validation. *PloS one*. 2012;7(4):e34853.

Landewe RBM. Editorial: how publication bias may harm treatment guidelines. *Arthritis & rheumatology (Hoboken, NJ)*. 2014;66(10):2661-3.

Landi G, Ciccone A. Publication bias via suppressed criticism. *Lancet (London, England)*. 1993;341(8846):697-8.

Lane A, Luminet O, Nave G, Mikolajczak M. Is there a Publication Bias in Behavioural Intranasal Oxytocin Research on Humans? Opening the File Drawer of One Laboratory. *Journal of neuroendocrinology*. 2016;28(4).

Lane DA, Kramer MS. Determining exposure underreporting in pharmacoepidemiologic case-control studies: methods and example. *Journal of clinical epidemiology*. 1999;52(12):1279-87.

Langley JD, Silva PA, Williams SM. Absence of psychosocial bias in the under-reporting of unintentional childhood injuries. *Journal of epidemiology and community health*. 1988;42(1):76-82.

Langrand-Escure J, Rivoirard R, Oriol M, Tinquaut F, Rancoule C, Chauvin F, et al. Quality of reporting in oncology phase II trials: A 5-year assessment through systematic review. *PloS one*. 2017;12(12):e0185536.

Langsetmo L, Platt RW, Ernst P, Bourbeau J. Underreporting exacerbation of chronic obstructive pulmonary disease in a longitudinal cohort. *American journal of respiratory and critical care medicine*. 2008;177(4):396-401.

Lanteri PF, Leguia A, Dolade NG, Garcia GC, Figueras A. Drug-induced gambling disorder: A not so rare but underreported condition. *Psychiatry research*. 2018;269:593-5.

Lanyon RI, Wershba RE. The effect of underreporting response bias on the assessment of psychopathology. *Psychological assessment*. 2013;25(2):331-8.

Larson PR. Reporting-bias in surveys of sensitive personal information. *Academic medicine : journal of the Association of American Medical Colleges*. 2010;85(5):742-3; author reply 3.

Latronico N, Botteri M, Minelli C, Zanotti C, Bertolini G, Candiani A. Quality of reporting of randomised controlled trials in the intensive care literature. A systematic analysis of papers published in *Intensive Care Medicine* over 26 years. *Intensive care medicine*. 2002;28(9):1316-23.

Latronico N, Manenti O, Baini L, Rasulo FA. Quality of reporting on the vegetative state in Italian newspapers. The case of Eluana Englaro. *PloS one*. 2011;6(4):e18706.

Latronico N, Metelli M, Turin M, Piva S, Rasulo FA, Minelli C. Quality of reporting of randomized controlled trials published in *Intensive Care Medicine* from 2001 to 2010. *Intensive care medicine*. 2013;39(8):1386-95.

Lau C, Toft U, Tetens I, Richelsen B, Jorgensen T, Borch-Johnsen K, et al. Association between dietary glycemic index, glycemic load, and body mass index in the Inter99 study: is underreporting a problem? *The American journal of clinical nutrition*. 2006;84(3):641-5.

Lau JT, Liu JL, Yu A, Wong CK. Conceptualization, reporting and underreporting of child abuse in Hong Kong. *Child abuse & neglect*. 1999;23(11):1159-74.

Launay E, Morfouace M, Deneux-Tharaux C, Gras le-Guen C, Ravaud P, Chalumeau M. Quality of reporting of studies evaluating time to diagnosis: a systematic review in paediatrics. *Archives of disease in childhood*. 2014;99(3):244-50.

Laupacis A. Methodological studies of systematic reviews: is there publication bias? *Archives of internal medicine*. 1997;157(3):357-8.

Law LS-C, Lo EA-G. A two-stage review process for randomized controlled trials: the ultimate solution for publication bias? Canadian journal of anaesthesia = Journal canadien d'anesthesie. 2016;63(12):1381-2.

Lawrance MF, Muthukrishnan G, Deichen J, Deichen M, Schaus J, Cole AM, et al. Genetic assessment of Staphylococcus aureus in an underreported locality: Ambulatory care clinic. Journal of infection and public health. 2018;11(5):648-56.

Lawson C. Mother-son sexual abuse: rare or underreported? A critique of the research. Child abuse & neglect. 1993;17(2):261-9.

Lawson GW. Under reporting of perinatal mortality. The Australian & New Zealand journal of obstetrics & gynaecology. 1987;27(4):312-4.

Lawson ML, Pham B, Klassen TP, Moher D. Systematic reviews involving complementary and alternative medicine interventions had higher quality of reporting than conventional medicine reviews. Journal of clinical epidemiology. 2005;58(8):777-84.

Layton DM, Clarke M. Quality of reporting of dental survival analyses. Journal of oral rehabilitation. 2014;41(12):928-40.

Le Fourn E, Giraudeau B, Chosidow O, Doutre M-S, Lorette G. Study design and quality of reporting of randomized controlled trials of chronic idiopathic or autoimmune urticaria: review. PloS one. 2013;8(8):e70717.

Le Henanff A, Giraudeau B, Baron G, Ravaud P. Quality of reporting of noninferiority and equivalence randomized trials. Jama. 2006;295(10):1147-51.

Lee A, Copas JB, Henmi M, Gin T, Chung RCK. Publication bias affected the estimate of postoperative nausea in an acupoint stimulation systematic review. Journal of clinical epidemiology. 2006;59(9):980-3.

Lee PE, Fischer HD, Rochon PA, Gill SS, Herrmann N, Bell CM, Sykora K, Anderson GM. Published randomized controlled trials of drug therapy for dementia often lack complete data on harm. Journal of Clinical Epidemiology. 61:11. 1152-1160. DOI: 10.1016/j.jclinepi.2007.09.012. 2008.

Lee S, Khan T, Grindlay D, Karantana A. Registration and Outcome-Reporting Bias in Randomized Controlled Trials of Distal Radial Fracture Treatment. *JB & JS open access*. 2018;3(3):e0065.

Lee TE, Kim A, Jang M, Jeon B. Underregistration and Underreporting of Stem Cell Clinical Trials in Neurological Disorders. *Journal of clinical neurology* (Seoul, Korea). 2018;14(2):215-24.

Leggett PL, Bissell CD, Churchman-Winn R. Aortic injury during laparoscopic fundoplication: an underreported complication. *Surgical endoscopy*. 2002;16(2):362.

Leimu R, Koricheva J. Cumulative meta-analysis: a new tool for detection of temporal trends and publication bias in ecology. *Proceedings Biological sciences*. 2004;271(1551):1961-6.

Lemahieu RA, Van Laere C, Verbruggen LA. Reflex sympathetic dystrophy: an underreported syndrome in children? *European journal of pediatrics*. 1988;147(1):47-50.

Lensen S, Jordan V, Showell M, Showell E, Shen V, Venetis C, et al. Non-publication and publication bias in reproductive medicine: a cohort analysis. *Human reproduction* (Oxford, England). 2017;32(8):1658-66.

Leow NM, Hussain Z, Petrie A, Donos N, Needleman IG. Has the quality of reporting in periodontology changed in 14years? A systematic review. *Journal of clinical periodontology*. 2016;43(10):833-8.

Lerer LB, Myers JE. Application of two secondary documentary sources to identify the underreporting of fatal occupational injuries in Cape Town, South Africa. *American journal of industrial medicine*. 1994;26(4):521-7.

Leung MHK, Hughes M, Lane J, Basu S, Ryan K, Jones AKP. Severe Disability in a Patient With Rheumatoid Arthritis and Sickle Cell Anemia: An Underreported, But Yet a Potentially Treatable Combination of Diseases. *Journal of clinical rheumatology : practical reports on rheumatic & musculoskeletal diseases*. 2015;21(8):458-9.

LeVois ME, Layard MW. Publication bias in the environmental tobacco smoke/coronary heart disease epidemiologic literature. *Regulatory toxicology and pharmacology* : RTP. 1995;21(1):184-91.

Levy G. Publication bias: its implications for clinical pharmacology. *Clinical pharmacology and therapeutics*. 1992;52(2):115-9.

Levy SM, Phatak UR, Tsao K, Wray CJ, Millas SG, Lally KP, et al. What is the quality of reporting of studies of interventions to increase compliance with antibiotic prophylaxis? *Journal of the American College of Surgeons*. 2013;217(5):770-9.

Lewis BJ, Carruthers G. Systematic review of spinal manipulation: A biased report. *Journal of the Royal Society of Medicine*. 2006;99(6):278; author reply 9-80.

Lewis KB, Wood B, Sepucha KR, Thomson RG, Stacey D. Quality of reporting of patient decision aids in recent randomized controlled trials: A descriptive synthesis and comparative analysis. *Patient education and counseling*. 2017;100(7):1387-93.

Li J-L, Ge L, Ma J-C, Zeng Q-L, Yao L, An N, et al. Quality of reporting of systematic reviews published in "evidence-based" Chinese journals. *Systematic reviews*. 2014;3:58.

Li J-Y, Zhang Y-F, Smith GS, Xue C-J, Luo Y-N, Chen W-H, et al. Quality of reporting of randomized clinical trials in tai chi interventions-a systematic review. *Evidence-based complementary and alternative medicine : eCAM*. 2011;2011:383245.

Li T, Mayo-Wilson E, Fusco N, Hong H, Dickersin K. Caveat emptor: the combined effects of multiplicity and selective reporting. *Trials*. 2018;19(1):497.

Li T, Shewade HD, Soe KT, Rainey JJ, Zhang H, Du X, et al. Under-reporting of diagnosed tuberculosis to the national surveillance system in China: an inventory study in nine counties in 2015. *BMJ open*. 2019;9(1):e021529.

Li X-R, Kruchko C, Wu X-C, Hsieh M-C, Andrews PA, Huang B, et al. Are Benign and Borderline Brain Tumors Underreported? *Journal of registry management*. 2016;43(4):187-94.

Liber AC, Warner KE. Has Underreporting of Cigarette Consumption Changed Over Time? Estimates Derived From US National Health Surveillance Systems Between 1965 and 2015. *American journal of epidemiology*. 2018;187(1):113-9.

Liberati A. Publication bias and the editorial process. *Jama*. 1992;267(21):2891; author reply -2.

Liddle BJ. Reporting deaths to the coroner. Pressure sores underreported. *BMJ (Clinical research ed)*. 1993;306(6891):1540.

Liebeskind DS, Kidwell CS, Sayre JW, Saver JL. Evidence of publication bias in reporting acute stroke clinical trials. *Neurology*. 2006;67(6):973-9.

Liechty JM, Bi X, Qu A. Feasibility and validity of a statistical adjustment to reduce self-report bias of height and weight in wave 1 of the Add Health study. *BMC medical research methodology*. 2016;16(1):124.

Liesegang TJ, Albert DM, Schachat AP. Not for your eyes: information concealed through publication bias. *American journal of ophthalmology*. 2008;146(5):638-40.

Lillegaard ITL, Loken EB, Andersen LF. Relative validation of a pre-coded food diary among children, under-reporting varies with reporting day and time of the day. *European journal of clinical nutrition*. 2007;61(1):61-8.

Lim S-S, Yoon J-H, Rhie J, Bae SW, Kim J, Won J-U. The Relationship between Free Press and Under-Reporting of Non-Fatal Occupational Injuries with Data from Representative National Indicators, 2015: Focusing on the Lethality Rate of Occupational Injuries among 39 Countries. *International journal of environmental research and public health*. 2018;15(12).

Lin IF, Wu H-S. Intergenerational Transfer and Reporting Bias: An Application of the MIMIC Model. *The journals of gerontology Series B, Psychological sciences and social sciences*. 2017;73(1):19-29.

Lin L, Chu H, Murad MH, Hong C, Qu Z, Cole SR, et al. Empirical Comparison of Publication Bias Tests in Meta-Analysis. *Journal of general internal medicine*. 2018;33(8):1260-7.

Lin L, Chu H. Quantifying publication bias in meta-analysis. *Biometrics*. 2018;74(3):785-94.

Lin L, Chu H. Rejoinder to "quantifying publication bias in meta-analysis". *Biometrics*. 2018;74(3):801-2.

Lindan CP, Hearst N, Singleton JA, Trachtenberg AI, Riordan NM, Tokagawa DA, et al. Underreporting of minority AIDS deaths in San Francisco Bay area, 1985-86. *Public health reports (Washington, DC : 1974)*. 1990;105(4):400-4.

Lion JR, Synder W, Merrill GL. Underreporting of assaults on staff in a state hospital. *Hospital & community psychiatry*. 1981;32(7):497-8.

LioRET S, Touvier M, Balin M, Huybrechts I, Dubuisson C, Dufour A, et al. Characteristics of energy under-reporting in children and adolescents. *The British journal of nutrition*. 2011;105(11):1671-80.

Lisboa-Goncalves P, Libanio D, Marques-Antunes J, Dinis-Ribeiro M, Pimentel-Nunes P. Quality of Reporting in Upper Gastrointestinal Endoscopy: Effect of a Simple Audit Intervention. *GE Portuguese journal of gastroenterology*. 2018;26(1):24-32.

Liss H. Publication bias in the pulmonary/allergy literature: effect of pharmaceutical company sponsorship. *The Israel Medical Association journal : IMAJ*. 2006;8(7):451-4.

Lissner L, Habicht JP, Strupp BJ, Levitsky DA, Haas JD, Roe DA. Body composition and energy intake: do overweight women overeat and underreport? *The American journal of clinical nutrition*. 1989;49(2):320-5.

Lissner L, Lindroos AK. Is dietary underreporting macronutrient-specific? *European journal of clinical nutrition*. 1994;48(6):453-4.

Littlewood C, Ashton J, Chance-Larsen K, May S, Sturrock B. The quality of reporting might not reflect the quality of the study: implications for undertaking and appraising a systematic review. *The Journal of manual & manipulative therapy*. 2012;20(3):130-4.

Liu J-P, Han M, Li X-X, Mu Y-J, Lewith G, Wang Y-Y, et al. Prospective registration, bias risk and outcome-reporting bias in randomised clinical trials of traditional Chinese medicine: an empirical methodological study. *BMJ open*. 2013;3(7).

Liu S. Dealing with publication bias in translational stroke research. *Journal of experimental stroke & translational medicine*. 2009;2(1):16-21.

Liu Y, DeSantis SM, Chen Y. Bayesian mixed treatment comparisons meta-analysis for correlated outcomes subject to reporting bias. *Journal of the Royal Statistical Society Series C, Applied statistics*. 2018;67(1):127-44.

Liumbruno G, Vaglio S, Facco G, Biancofiore G, Calizzani G, Pupella S, et al. Transfusion-related acute lung injury incidence in Italy two years after the adoption of a national proactive exclusion policy: under-diagnosing and underreporting. *Minerva anesthesiologica*. 2014;80(9):1063-4.

Livingston M, Callinan S. Underreporting in alcohol surveys: whose drinking is underestimated? *Journal of studies on alcohol and drugs*. 2015;76(1):158-64.

Lo SSM, Atceken Z, Carone M, Yousem DM. Sacroiliac joint vacuum phenomenon--underreported finding. *Clinical imaging*. 2011;35(6):465-9.

Loberg M, Kalager M, Hoff G. Tailoring the message with selective reporting. *European journal of epidemiology*. 2018;33(8):773.

Loftin C, Wiersema B, McDowall D, Dobrin A. Underreporting of justifiable homicides committed by police officers in the United States, 1976-1998. *American journal of public health*. 2003;93(7):1117-21.

Logroscino G, Capozzo R, Tortelli R, Marin B. Current Issues in Randomized Clinical Trials of Neurodegenerative Disorders at Enrolment and Reporting: Diagnosis, Recruitment, Representativeness of Patients, Ethnicity, and Quality of Reporting. *Frontiers of neurology and neuroscience*. 2016;39:24-36.

Long MW, Ward ZJ, Resch SC, Cradock AL, Wang YC, Giles CM, et al. State-level estimates of childhood obesity prevalence in the United States corrected for report bias. *International journal of obesity (2005)*. 2016;40(10):1523-8.

Looi LM. Publication bias and the Medical Editors Trial Amnesty. *The Malaysian journal of pathology*. 1997;19(2):91-2.

Lopez Guzman J. Bias in publications about the mechanism of action of the morning-after pill. *Cuadernos de bioetica : revista oficial de la Asociacion Espanola de Bioetica y Etica Medica*. 2011;22(75):169-84.

Lopez-Gonzalez E, Herdeiro MT, Figueiras A. Determinants of under-reporting of adverse drug reactions: a systematic review. *Drug safety*. 2009;32(1):19-31.

Louie GH, Ward MM. Sex disparities in self-reported physical functioning: true differences, reporting bias, or incomplete adjustment for confounding? *Journal of the American Geriatrics Society*. 2010;58(6):1117-22.

Loureiro LVM, Callegaro Filho D, Rocha AdA, Prado BL, Mutao TS, Donnarumma CdC, et al. Is there publication bias towards Brazilian articles on cancer? *Einstein (Sao Paulo, Brazil)*. 2013;11(1):15-22.

Lovell A, Skellern J, Mason T. Violence and under-reporting: learning disability nursing and the impact of environment, experience and banding. *Journal of clinical nursing*. 2011;20(23-24):3304-12.

Lovell ME. Under-reporting of trauma from lorry mirrors? *Injury*. 1992;23(5):343.

Lovern E. Flouting the law. New York taking steps to counter hospitals' underreporting of errors. *Modern healthcare*. 2001;31(8):33.

Lozano R, Torres-Palacios LM, Soliz PN. Comments on the article "Evaluation of maternal mortality under-reporting in the heights of Chiapas using the RAMOS and modified RAMOS strategies" by Graciela Freyermuth et al. *Salud publica de Mexico*. 2010;52(5):381-3.

Lu L, Liao M, Zeng J, He J. Quality of reporting and its correlates among randomized controlled trials on acupuncture for cancer pain: application of the CONSORT 2010 Statement and STRICTA. *Expert review of anticancer therapy*. 2013;13(4):489-98.

Lu L, Zeng J, Chen Y. Quality of reporting in randomized controlled trials conducted in China on the treatment of cancer pain. *Expert review of anticancer therapy*. 2011;11(6):871-7.

Lubowitz JH, Poehling GG. Publication bias. *Arthroscopy : the journal of arthroscopic & related surgery : official publication of the Arthroscopy Association of North America and the International Arthroscopy Association*. 2006;22(10):1031-2.

Luderer M, Kaplan-Wickel N, Richter A, Reinhard I, Kiefer F, Weber T. Screening for adult attention-deficit/hyperactivity disorder in alcohol dependent patients: Underreporting of ADHD symptoms in self-report scales. *Drug and alcohol dependence*. 2019;195:52-8.

Luengo C, Paravic T, Valenzuela S. Causes of underreporting of occupational injuries and adverse events in Chile. *Revista panamericana de salud publica = Pan American journal of public health*. 2016;39(2):86-92.

Luhrmann PM, Herbert BM, Neuhauser-Berthold M. Underreporting of energy intake in an elderly German population. *Nutrition (Burbank, Los Angeles County, Calif)*. 2001;17(11-12):912-6.

Lundy A, Gottheil E, McLellan AT, Weinstein SP, Sterling RC, Serota RD. Underreporting of cocaine use at posttreatment follow-up and the measurement of treatment effectiveness. *The Journal of nervous and mental disease*. 1997;185(7):459-62.

Lunetta P, Impinen A, Lounamaa A. Underreporting of external cause codes in the Finnish Hospital Discharge Register. *Scandinavian journal of public health*. 2008;36(8):870-4.

Luo G, Lu L, Zeng J. Quality of reporting of randomised controlled trials of acupuncture for neurological diseases conducted in China. *Acupuncture in medicine : journal of the British Medical Acupuncture Society*. 2014;32(5):411-7.

Luoto R. Publication bias--the Achilles' heel of medical research. *Duodecim; laaketieteellinen aikakauskirja*. 2012;128(5):489-96.

Luquetti DV, Koifman RJ. Quality of reporting on birth defects in birth certificates: case study from a Brazilian reference hospital. *Cadernos de saude publica*. 2009;25(8):1721-31.

Lutonski JE, Krabbe PFM, Bleijenberg N, Blom JW, Buurman BM, Kempen GIJM, et al. Survey Mode Biases Reporting of Activities of Daily Living and Instrumental Activities of Daily Living. *Journal of the American Geriatrics Society*. 2015;63(11):2419-21.

Lyness JM, Cox C, Curry J, Conwell Y, King DA, Caine ED. Older age and the underreporting of depressive symptoms. *Journal of the American Geriatrics Society*. 1995;43(3):216-21.

Lyons G. Language: another cause of publication bias. *European journal of anaesthesiology*. 2016;33(9):620-1.

Lytras T, Spala G, Bonovas S, Panagiotopoulos T. Evaluation of tuberculosis underreporting in Greece through comparison with anti-tuberculosis drug consumption. *PloS one*. 2012;7(11):e50033.

Macaskill P, Walter SD, Irwig L. A comparison of methods to detect publication bias in meta-analysis. *Statistics in medicine*. 2001;20(4):641-54.

Macdiarmid J, Blundell J. Assessing dietary intake: Who, what and why of under-reporting. *Nutrition research reviews*. 1998;11(2):231-53.

Macdiarmid JJ, Blundell JE. Dietary under-reporting: what people say about recording their food intake. *European journal of clinical nutrition*. 1997;51(3):199-200.

MacDougall L, Majowicz S, Dore K, Flint J, Thomas K, Kovacs S, et al. Under-reporting of infectious gastrointestinal illness in British Columbia, Canada: who is counted in provincial communicable disease statistics? *Epidemiology and infection*. 2008;136(2):248-56.

Machan C, Ammenwerth E, Bodner T. Publication bias in medical informatics evaluation research: is it an issue or not? *Studies in health technology and informatics*. 2006;124:957-62.

- Maciejewski ML, Hanlon JT. Underreporting potentially inappropriate prescribing for older outpatients: does it matter? *Annals of internal medicine*. 2013;159(7):496-7.
- Mackenzie SG, Lippman A. An investigation of report bias in a case-control study of pregnancy outcome. *American journal of epidemiology*. 1989;129(1):65-75.
- Mackesy-Amiti ME, Fendrich M, Johnson TP. Prevalence of recent illicit substance use and reporting bias among MSM and other urban males. *Addictive behaviors*. 2008;33(8):1055-60.
- Macklin R. Conflict of interest and bias in publication. *Indian journal of medical ethics*. 2016;1(4):219-22.
- Macleod J, Hickman M, Smith GD. Reporting bias and self-reported drug use. *Addiction (Abingdon, England)*. 2005;100(4):562-3.
- Macleod LC, Dai JC, Holt SK, Bassett JC, Wright JL, Gore JL. Underuse and underreporting of smoking cessation for smokers with a new urologic cancer diagnosis. *Urologic oncology*. 2015;33(12):504.e1-7.
- Macleod MR, O'Collins T, Howells DW, Donnan GA. Pooling of animal experimental data reveals influence of study design and publication bias. *Stroke*. 2004;35(5):1203-8.
- MacPherson H, Altman DG. Improving the quality of reporting acupuncture interventions: describing the collaboration between STRICTA, CONSORT and the Chinese Cochrane Centre. *Journal of evidence-based medicine*. 2009;2(1):57-60.
- Madden K, Phillips M, Solow M, McKinnon V, Bhandari M. A systematic review of quality of reporting in registered intimate partner violence studies: where can we improve? *Journal of injury & violence research*. 2019;11(2).
- Madhuvan HS, Krishnamurthy A, Prakash P, Shariff S. Diabetic Muscle Infarction (Myonecrosis): Underdiagnosed or Underreported? *The Journal of the Association of Physicians of India*. 2015;63(4):71-3.

Madigan D, Sigelman DW, Mayer JW, Furberg CD, Avorn J. Under-reporting of cardiovascular events in the rofecoxib Alzheimer disease studies. *American heart journal*. 2012;164(2):186-93.

Mafra D, Moraes C, Leal VO, Farage NE, Stockler-Pinto MB, Fouque D. Underreporting of energy intake in maintenance hemodialysis patients: a cross-sectional study. *Journal of renal nutrition : the official journal of the Council on Renal Nutrition of the National Kidney Foundation*. 2012;22(6):578-83.

Magalhaes AFA, Caldas ED. Underreporting of fatal poisonings in Brazil - A descriptive study using data from four information systems. *Forensic science international*. 2018;287:136-41.

Maggi CB, Griebeler IH, Dal Pizzol TD. Adverse events reported in randomized clinical trials of drug therapies: the information is still insufficient. *Journal of Clinical Epidemiology*. 66:7. 802-803. DOI: 10.1016/j.jclinepi.2012.12.006. 2013.

Magin P, Victoire A, Zhen XM, Furler J, Pirotta M, Lasserson DS, et al. Under-reporting of socioeconomic status of patients in stroke trials: adherence to CONSORT principles. *Stroke*. 2013;44(10):2920-2.

Magos A, Cumbis A, Katsetos C. Bias against publication of surgical papers. *Lancet (London, England)*. 2000;355(9201):413.

Mahady SE, Schlub T, Bero L, Moher D, Tovey D, George J, et al. Side effects are incompletely reported among systematic reviews in gastroenterology. *Journal of clinical epidemiology*. 2015;68(2):144-53.

Mahid SS, Qadan M, Hornung CA, Galandiuk S. Assessment of publication bias for the surgeon scientist. *The British journal of surgery*. 2008;95(8):943-9.

Mahinbakht A, Lavasani SM, Guirguis M. The Quality of Reporting Harms-Related Data in Clinical Trials of Adjuvant Trastuzumab in Early-Stage Breast Cancer Treatment. *Therapeutic innovation & regulatory science*. 2014;48(3):299-304.

Main J, Reddy L, Lazarevic M, Whelan PJ. Are late-onset eating disorders in the elderly really the more common variant? Concerns around publication bias. *International psychogeriatrics*. 2011;23(4):670-1.

Majowicz SE, Edge VL, Fazil A, McNab WB, Dore KA, Sockett PN, et al. Estimating the under-reporting rate for infectious gastrointestinal illness in Ontario. *Canadian journal of public health = Revue canadienne de sante publique*. 2005;96(3):178-81.

Majumder D, Sinha A, Bhattacharya SK, Ram R, Dasgupta U, Ram A. Epidemiological profile of snake bite in south 24 Parganas district of West Bengal with focus on underreporting of snake bite deaths. *Indian journal of public health*. 2014;58(1):17-21.

Malicki M, Marusic A, Consortium O. Is there a solution to publication bias? Researchers call for changes in dissemination of clinical research results. *Journal of clinical epidemiology*. 2014;67(10):1103-10.

Malla A, Hoenig J. Differences in suicide rates: an examination of under-reporting. *Canadian journal of psychiatry Revue canadienne de psychiatrie*. 1983;28(4):291-3.

Mallinckrodt CH, Golden BL, Bourdon RM. The effect of selective reporting on estimates of weaning weight parameters in beef cattle. *Journal of animal science*. 1995;73(5):1264-70.

Manchanda R, Varma R. Representation of authors and editors from poor countries: observed publication bias may reflect who is funding research. *BMJ (Clinical research ed)*. 2004;329(7457):110.

Mangione CM, Gerberding JL, Cummings SR. Occupational exposure to HIV: frequency and rates of underreporting of percutaneous and mucocutaneous exposures by medical housestaff. *The American journal of medicine*. 1991;90(1):85-90.

Mann J. Review of publication bias in studies on publication bias: mandatory publication of data may help. *BMJ (Clinical research ed)*. 2005;331(7517):638.

Mansouri A, Ahmadvand A, Hadjibabaie M, Javadi M, Khoee SH, Dastan F, et al. A review of medication errors in iran: sources, underreporting reasons and preventive measures. *Iranian journal of pharmaceutical research : IJPR*. 2014;13(1):3-17.

Marcus JL, Bernstein KT, Philip S, Klausner JD. Evidence of underreporting of adverse childhood experiences, San Francisco municipal STD clinic, 2007. Sexually transmitted diseases. 2009;36(7):422-4.

Marin-Franch I. Publication bias and the chase for statistical significance. Journal of optometry. 2018;11(2):67-8.

Markman M. Chemotherapy-induced peripheral neuropathy: underreported and underappreciated. Current pain and headache reports. 2006;10(4):275-8.

Markussen MS, Veierod MB, Ursin G, Andersen LF. The effect of under-reporting of energy intake on dietary patterns and on the associations between dietary patterns and self-reported chronic disease in women aged 50-69 years. The British journal of nutrition. 2016;116(3):547-58.

Marley WD, McDonald K, Wilson A. Osteoarthritis-associated navicular stress fractures: an underreported occurrence? Foot & ankle international. 2013;34(2):287-9.

Marshman Z, Farid F. The quality of reporting of randomised controlled trials in dental public health. Community dental health. 2010;27(4):253-6.

Martin JLR, Perez V, Sacristan M, Alvarez E. Is grey literature essential for a better control of publication bias in psychiatry? An example from three meta-analyses of schizophrenia. European psychiatry : the journal of the Association of European Psychiatrists. 2005;20(8):550-3.

Martin RM, Kapoor KV, Wilton LV, Mann RD. Underreporting of suspected adverse drug reactions to newly marketed ("black triangle") drugs in general practice: observational study. BMJ (Clinical research ed). 1998;317(7151):119-20.

Martorell R, Habicht JP, Yarbrough C, Lechtig A, Klein RE. Underreporting in fortnightly recall morbidity surveys. The Journal of tropical pediatrics and environmental child health. 1976;22(3):129-34.

Marzel A, Desai PT, Nissan I, Schorr YI, Suez J, Valinsky L, et al. Integrative analysis of Salmonellosis in Israel reveals association of Salmonella enterica Serovar 9,12:l,v:- with extraintestinal infections, dissemination of endemic S.

enterica Serovar Typhimurium DT104 biotypes, and severe underreporting of outbreaks. *Journal of clinical microbiology*. 2014;52(6):2078-88.

Marziale MHP. Underreporting of accidents with cutting and piercing objects in nursing. *Revista brasileira de enfermagem*. 2003;56(2):164-8.

Massengill JB, Sample KM, Pilarski R, McElroy J, Davidorf FH, Cebulla CM, et al. Analysis of the exome aggregation consortium (ExAC) database suggests that the BAP1-tumor predisposition syndrome is underreported in cancer patients. *Genes, chromosomes & cancer*. 2018;57(9):478-81.

Mathew SJ, Charney DS. Publication bias and the efficacy of antidepressants. *The American journal of psychiatry*. 2009;166(2):140-5.

Mathews S, Abrahams N, Jewkes R, Martin LJ. Underreporting child abuse deaths: experiences from a national study on child homicide. *South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde*. 2013;103(3):132-3.

Matsumoto T, Shah R, Dave M, Shah N, Parekh SG. Hallux Varus: An Underreported Presentation of Rheumatoid Arthritis. *Foot & ankle specialist*. 2016;9(2):169-73.

Matthews GA, Dumville JC, Hewitt CE, Torgerson DJ. Retrospective cohort study highlighted outcome reporting bias in UK publicly funded trials. *Journal of clinical epidemiology*. 2011;64(12):1317-24.

Matthews JH, Bhandari S, Chapman SJ, Nepogodiev D, Pinkney T, Bhangu A. Underreporting of Secondary Endpoints in Randomized Trials: Cross-sectional, Observational Study. *Annals of surgery*. 2016;264(6):982-6.

Mavinga Phanzu D, Suykerbuyk P, Saunderson P, Ngwala Lukanu P, Masamba Minuku J-B, Imposo DBB, et al. Burden of *Mycobacterium ulcerans* disease (Buruli ulcer) and the underreporting ratio in the territory of Songololo, Democratic Republic of Congo. *PLoS neglected tropical diseases*. 2013;7(12):e2563.

Mavridis D, Efthimiou O, Leucht S, Salanti G. Publication bias and small-study effects magnified effectiveness of antipsychotics but their relative ranking remained invariant. *Journal of clinical epidemiology*. 2016;69:161-9.

Mavridis D, Salanti G. Exploring and accounting for publication bias in mental health: a brief overview of methods. *Evidence-based mental health*. 2014;17(1):11-5.

Mavridis D, Salanti G. How to assess publication bias: funnel plot, trim-and-fill method and selection models. *Evidence-based mental health*. 2014;17(1):30.

Mavridis D, Sutton A, Cipriani A, Salanti G. A fully Bayesian application of the Copas selection model for publication bias extended to network meta-analysis. *Statistics in medicine*. 2013;32(1):51-66.

Mavridis D, Welton NJ, Sutton A, Salanti G. A selection model for accounting for publication bias in a full network meta-analysis. *Statistics in medicine*. 2014;33(30):5399-412.

Maxwell P, Mendall M. Prevalence of gastrointestinal symptoms after bacterial gastroenteritis. Patients with the irritable bowel syndrome may underreport historical symptoms. *BMJ (Clinical research ed)*. 1997;314(7098):1902-3.

Maxwell R, Wells C, Verne J. Under-reporting of progressive supranuclear palsy. *Lancet (London, England)*. 2010;376(9758):2072.

Mayer MG. How publication bias and inadequate research transparency endanger medicine. *JAAPA : official journal of the American Academy of Physician Assistants*. 2016;29(6):1-2.

Mazzei MA, Contorni F, Gentili F, Guerrini S, Mazzei FG, Pinto A, et al. Incidental and Underreported Pleural Plaques at Chest CT: Do Not Miss Them-Asbestos Exposure Still Exists. *BioMed research international*. 2017;2017:6797826.

Mazzei MA, Sartorelli P, Bagnacci G, Gentili F, Sisinni AG, Fausto A, et al. Occupational Lung Diseases: Underreported Diagnosis in Radiological Practice. *Seminars in ultrasound, CT, and MR*. 2019;40(1):36-50.

McAllister I, Makkai T. Correcting for the underreporting of drug use in opinion surveys. *The International journal of the addictions*. 1991;26(9):945-61.

McAnulty JM, Rubin GL, Rushworth RL, Kaldor J. Underreporting of AIDS, New South Wales, 1988-1989. *The Medical journal of Australia*. 1992;156(7):452-5.

McBeath JG, Nanda A. Roller coaster migraine: an underreported injury? *Headache*. 2000;40(9):745-7.

McCambridge J. A case study of publication bias in an influential series of reviews of drug education. *Drug and alcohol review*. 2007;26(5):463-8.

McCarthy M. Publication bias skewed results of anxiety drug treatment trials, study finds. *BMJ (Clinical research ed)*. 2015;350:h1948.

McCarthy PD, Walsh D. Suicide in Dublin: I. The under-reporting of suicide and the consequences for national statistics. *The British journal of psychiatry : the journal of mental science*. 1975;126:301-8.

McCaw-Binns AM, Mullings JA, Holder Y. Vital registration and under-reporting of maternal mortality in Jamaica. *International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics*. 2015;128(1):62-7.

McCoy TH, Jr., Snapper L, Stern TA, Perlis RH. Underreporting of Delirium in Statewide Claims Data: Implications for Clinical Care and Predictive Modeling. *Psychosomatics*. 2016;57(5):480-8.

McCrary J, Christensen G, Fanelli D. Conservative Tests under Satisficing Models of Publication Bias. *PloS one*. 2016;11(2):e0149590.

McDonald T, Burghart MA, Nazir N. Underreporting of Concussions and Concussion-Like Symptoms in Female High School Athletes. *Journal of trauma nursing : the official journal of the Society of Trauma Nurses*. 2016;23(5):241-6.

McDougall RJ. "Don't tell them that you're working when you are": safe hours and underreporting. *The Medical journal of Australia*. 2013;198(1):20.

McGauran N, Wieseler B, Kreis J, Schuler Y-B, Kolsch H, Kaiser T. Reporting bias in medical research - a narrative review. *Trials*. 2010;11:37.

McGowan CA, McAuliffe FM. Maternal nutrient intakes and levels of energy underreporting during early pregnancy. *European journal of clinical nutrition*. 2012;66(8):906-13.

McGowan DR, Norris JM, Bennett GL. The quality of reporting of randomized controlled trials. *Current medical research and opinion*. 2015;31(8):1609-10.

McKenna PJ, Laws KR, Jauhar S. Selective reporting of results in guidelines. *The British journal of psychiatry : the journal of mental science*. 2015;207(6):560-1.

McKenzie DC, Johnson RK, Harvey-Berino J, Gold BC. Impact of interviewer's body mass index on underreporting energy intake in overweight and obese women. *Obesity research*. 2002;10(6):471-7.

McMahon NE, Holland E-J, Miller C, Patel K, Connell LA. Activities to support the implementation of complex interventions as part of routine care: a review of the quality of reporting in cluster randomised controlled trials. *BMJ open*. 2015;5(10):e008251.

McMahon RP, Waclawiw MA, Geller NL, Barton FB, Terrin ML, Bonds DR. An extension of stochastic curtailment for incompletely reported and classified recurrent events: the Multicenter Study of Hydroxyurea in Sickle Cell Anemia (MSH). *Controlled clinical trials*. 1997;18(5):420-30.

McMurrich SL, Johnson SL, Peckham AD. Situational rumination: a method for minimizing retrospective reporting bias. *CNS neuroscience & therapeutics*. 2012;18(1):87-8.

McNamee R. Outcome of retrospective cohort studies and study size: a publication bias? *British journal of industrial medicine*. 1989;46(2):143.

McShane BB, Bockenholt U, Hansen KT. Adjusting for Publication Bias in Meta-Analysis: An Evaluation of Selection Methods and Some Cautionary Notes. *Perspectives on psychological science : a journal of the Association for Psychological Science*. 2016;11(5):730-49.

Medury A, Grembek O, Loukaitou-Sideris A, Shafizadeh K. Investigating the underreporting of pedestrian and bicycle crashes in and around university campuses - a crowdsourcing approach. *Accident; analysis and prevention*. 2017.

Meek JI, Roberts CL, Smith EV, Jr., Cartter ML. Underreporting of Lyme disease by Connecticut physicians, 1992. *Journal of public health management and practice* : JPHMP. 1996;2(4):61-5.

Meghani SH. Leveling the playing field: does pain disparity literature suffer from a reporting bias? *Pain medicine* (Malden, Mass). 2005;6(3):269-70; author reply 71-2.

Meier TB, Brummel BJ, Singh R, Nerio CJ, Polanski DW, Bellgowan PSF. The underreporting of self-reported symptoms following sports-related concussion. *Journal of science and medicine in sport*. 2015;18(5):507-11.

Meijer HJA, Raghoobar GM. Quality of reporting of descriptive studies in implant dentistry. Critical aspects in design, outcome assessment and clinical relevance. *Journal of clinical periodontology*. 2012;39 Suppl 12:108-13.

Meinhardt NG, Souto KEP, Ulbrich-Kulczynski JM, Stein AT. Hepatic outcomes after jejunoileal bypass: is there a publication bias? *Obesity surgery*. 2006;16(9):1171-8.

Melander H, Ahlqvist-Rastad J, Meijer G, Beermann B. Evidence b(i)ased medicine--selective reporting from studies sponsored by pharmaceutical industry: review of studies in new drug applications. *BMJ (Clinical research ed)*. 2003;326(7400):1171-3.

Melander H. Selective reporting--greater problem than selective publishing? *Lakartidningen*. 2005;102(4):224-5.

Mell LK, Zietman AL. Introducing prospective manuscript review to address publication bias. *International journal of radiation oncology, biology, physics*. 2014;90(4):729-32.

Mellou K, Sideroglou T, Kallimani A, Potamiti-Komi M, Pervanidou D, Lillakou E, et al. Evaluation of underreporting of salmonellosis and shigellosis hospitalised cases in Greece, 2011: results of a capture-recapture study and a hospital registry review. *BMC public health*. 2013;13:875.

Melosini L, Vetrano U, Dente FL, Cristofano M, Giraldi M, Gabbrielli L, et al. Evaluation of underreporting tuberculosis in Central Italy by means of record linkage. *BMC public health*. 2012;12:472.

Mendez MA, Popkin BM, Buckland G, Schroder H, Amiano P, Barricarte A, et al. Alternative methods of accounting for underreporting and overreporting when measuring dietary intake-obesity relations. *American journal of epidemiology*. 2011;173(4):448-58.

Mendlowicz MV, Figueira I, Souza WF. Publication bias against eating disorders? *The American journal of psychiatry*. 2004;161(12):2327.

Meng X, Kerr DA, Zhu K, Devine A, Solah VA, Wright J, et al. Under-reporting of energy intake in elderly Australian women is associated with a higher body mass index. *The journal of nutrition, health & aging*. 2013;17(2):112-8.

Mennen LI, Jackson M, Cade J, Mbanya JC, Lafay L, Sharma S, et al. Underreporting of energy intake in four populations of African origin. *International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity*. 2000;24(7):882-7.

Menzel NN. Underreporting of musculoskeletal disorders among health care workers: research needs. *AAOHN journal : official journal of the American Association of Occupational Health Nurses*. 2008;56(12):487-94.

Merli MG, Raftery AE. Are births underreported in rural China? Manipulation of statistical records in response to China's population policies. *Demography*. 2000;37(1):109-26.

Mesrobian H-GO. Re: A critical assessment of the quality of reporting of randomized, controlled trials in the urology literature. C. D. Scales, Jr., R. D. Norris, s. A. Keitz, B. L. Peterson, G. M. Preminger, J. Vieweg and P. Dahm. *J Urol* 2007; 177: 1090-1095. *The Journal of urology*. 2008;179(6):2488-9; author reply 9.

Messeri PA, Allen JA, Mowery PD, Healton CG, Haviland ML, Gable JM, et al. Do tobacco countermarketing campaigns increase adolescent under-reporting of smoking? *Addictive behaviors*. 2007;32(7):1532-6.

Messika J, Gaudry S, Tubach F, Guillo S, Dreyfuss D, Hajage D, et al. Underreporting of End-of-Life Decisions in Critical Care Trials: A Call to Modify the Consolidated Standards of Reporting Trials Statement. *American journal of respiratory and critical care medicine*. 2018;197(2):263-6.

Metcalf S, Burgess C, Laking G, Evans J, Wells S, Crausaz S. Trastuzumab: possible publication bias. *Lancet (London, England)*. 2008;371(9625):1646-8.

Mette A, Reuss AM, Feig M, Kappelmayer L, Siedler A, Eckmanns T, et al. Under-reporting of measles: an evaluation based on data from north rhine-westphalia. *Deutsches Arzteblatt international*. 2011;108(12):191-6.

Meyer C, Fuller K, Scott J, Vassar M. Is publication bias present in gastroenterological research? An analysis of abstracts presented at an annual congress. *PeerJ*. 2018;6:e4995.

Mhaskar RS, Reljic T, Wao H, Kumar A, Miladinovic B, Djulbegovic B. Treatment-related harms: What was planned and what was reported? National Cancer Institute's Co-operative group phase III randomized controlled trials: a systematic review. *Journal of Clinical Epidemiology*. 67:3. 354-356. DOI: 10.1016/j.jclinepi.2013.07.006. 2014.

Michel P, Wilson JB, Martin SW, Clarke RC, McEwen SA, Gyles CL. Estimation of the under-reporting rate for the surveillance of Escherichia coli O157:H7 cases in Ontario, Canada. *Epidemiology and infection*. 2000;125(1):35-45.

Michelessi M, Lucenteforte E, Miele A, Oddone F, Crescioli G, Fameli V, et al. Diagnostic accuracy research in glaucoma is still incompletely reported: An application of Standards for Reporting of Diagnostic Accuracy Studies (STARD) 2015. *PloS one*. 2017;12(12):e0189716.

Milham S, Jr. Underreporting of incidence of cleft lip and palate. *American journal of diseases of children (1960)*. 1963;106:185-8.

Miller DR. Failure to report harms and adverse events in clinical trials: Why does the problem continue? *Canadian Journal of Anesthesia-Journal Canadien D Anesthesie*. 59:11. 1007-1012. DOI: 10.1007/s12630-012-9777-6. 2012.

Miller E, Roposch A, Uleryk E, Doria AS. Juvenile idiopathic arthritis of peripheral joints: quality of reporting of diagnostic accuracy of conventional MRI. *Academic radiology*. 2009;16(6):739-57.

Miller F, Barasch A. The under-reporting of alcohol use: the role of organic mental syndromes. *Drug and alcohol dependence*. 1985;15(4):347-51.

Miller KA, Bell TP, Germano JM. Understanding publication bias in reintroduction biology by assessing translocations of New Zealand's herpetofauna. *Conservation biology : the journal of the Society for Conservation Biology*. 2014;28(4):1045-56.

Miller KL, Shafman TD, Anscher MS, Zhou S-M, Clough RW, Garst JL, et al. Bronchial stenosis: an underreported complication of high-dose external beam radiotherapy for lung cancer? *International journal of radiation oncology, biology, physics*. 2005;61(1):64-9.

Miller PM, Srouk Y, Watemberg N. Febrile myoclonus: an underreported, benign condition in infancy often misinterpreted as febrile seizures. *Pediatric emergency care*. 2008;24(9):618-20.

Miller TR, Gibson R, Zaloshnja E, Blincoe LJ, Kindelberger J, Strashny A, et al. Underreporting of driver alcohol involvement in United States police and hospital records: capture-recapture estimates. *Annals of advances in automotive medicine Association for the Advancement of Automotive Medicine Annual Scientific Conference*. 2012;56:87-96.

Million M, Raoult D. Publication biases in probiotics. *European journal of epidemiology*. 2012;27(11):885-6.

Mindel A, Tenant-Flowers M. Are STIs underreported in rural Australia? *Sexually transmitted infections*. 1999;75(6):371-2.

Miranda JS, Abbade LPF, Deonizio AP, Abbade JF, Mbuagbaw L, Thabane L. Quality of reporting of outcomes in trials of therapeutic interventions for pressure ulcers in adults: a protocol for a systematic survey. *BMJ open*. 2019;9(2):e024633.

Mirmiran P, Esmailzadeh A, Azizi F. Under-reporting of energy intake affects estimates of nutrient intakes. *Asia Pacific journal of clinical nutrition*. 2006;15(4):459-64.

Mirza A, Reinhart MK, Bove JJ. Index radial collateral ligament repair with titanium mini-suture anchor: osteolysis complication of an underreported injury. *Hand (New York, NY)*. 2010;5(3):294-8.

Mirzazadeh A, Shokoohi M, Navadeh S, Danesh A, Jain J, Sedaghat A, et al. Underreporting in HIV-related high-risk behaviors: comparing the results of multiple data collection methods in a behavioral survey of prisoners in Iran. *The Prison journal*. 2018;98(2):213-28.

Misakian AL, Bero LA. Publication bias and research on passive smoking: comparison of published and unpublished studies. *Jama*. 1998;280(3):250-3.

Misiri HE, Muula AS. Under-reporting of gravidity in a rural Malawian population. *African health sciences*. 2005;5(4):335-7.

Mittal N, Mittal R, Kumar H, Medhi B. Sodium glucose co-transporter 2 inhibitors for glycemic control in type 2 diabetes mellitus: Quality of reporting of randomized controlled trials. *Perspectives in clinical research*. 2016;7(1):21-7.

Mittmann N, Knowles SR, Gomez M, Fish JS, Cartotto R, Shear NH. Evaluation of the extent of under-reporting of serious adverse drug reactions: the case of toxic epidermal necrolysis. *Drug safety*. 2004;27(7):477-87.

Mlaver E, Keifer O, Jr., Tora MS, Campbell M, Boulis NM. Phantom Sensation-Underreported Sensory Outcome Following Intercostal-to-Musculocutaneous Nerve Transfer. *World neurosurgery*. 2019;122:303-7.

Mlinaric A, Horvat M, Supak Smolic V. Dealing with the positive publication bias: Why you should really publish your negative results. *Biochemia medica*. 2017;27(3):030201.

Moberg-Mogren E, Nelson DL. Evaluating the quality of reporting occupational therapy randomized controlled trials by expanding the CONSORT criteria. *The American journal of occupational therapy : official publication of the American Occupational Therapy Association*. 2006;60(2):226-35.

Moher D, Altman DG, Schulz KF, Elbourne DR. Opportunities and challenges for improving the quality of reporting clinical research: CONSORT and beyond.

CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne. 2004;171(4):349-50.

Moher D, Cook DJ, Eastwood S, Olkin I, Rennie D, Stroup DF. Improving the quality of reports of meta-analyses of randomised controlled trials: the QUOROM statement. Quality of Reporting of Meta-analyses. Lancet (London, England). 1999;354(9193):1896-900.

Moher D. Publication bias. Lancet (London, England). 1993;342(8879):1116.

Mohler R, Bartoszek G, Meyer G. Quality of reporting of complex healthcare interventions and applicability of the CReDECI list - a survey of publications indexed in PubMed. BMC medical research methodology. 2013;13:125.

Moja PL, Moschetti I, D'Amico R. Outcome reporting bias in government-funded RCTs. CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne. 2005;172(7):857; author reply

Moldovan HR, Voidazan ST, John SM, Weinert P, Moldovan G, VlasIU MA, et al. The Eastern European experience on occupational skin diseases. Make underreporting an issue? Journal of the European Academy of Dermatology and Venereology : JEADV. 2017;31 Suppl 4:5-11.

Mones J, Biarnes M, Trindade F. Hyporeflexive wedge-shaped band in geographic atrophy secondary to age-related macular degeneration: an underreported finding. Ophthalmology. 2012;119(7):1412-9.

Montori VM, Smieja M, Guyatt GH. Publication bias: a brief review for clinicians. Mayo Clinic proceedings. 2000;75(12):1284-8.

Montorsi F, Gandaglia G. Re: Georg Jancke, Firas Aljabery, Sigurdur Gudjonsson, et al. Port-site Metastases After Robot-assisted Radical Cystectomy: Is There a Publication Bias? Eur Urol 2018;73:641-2. European urology. 2019;75(2):e31.

Moore TJ, Bennett CL. Underreporting of hemorrhagic and thrombotic complications of pharmaceuticals to the U.S. Food and Drug Administration: empirical findings for warfarin, clopidogrel, ticlopidine, and thalidomide from the

Southern Network on Adverse Reactions (SONAR). Seminars in thrombosis and hemostasis. 2012;38(8):905-7.

Moradi DR, Moy PK, Chiappelli F. Evidence-based research in alternative protocols to dental implantology: a closer look at publication bias. Journal of the California Dental Association. 2006;34(11):877-86.

Moradinazar M, Najafi F, Baneshi MR, Haghdoost AA. Estimation of the rate and number of underreported deliberate self-poisoning attempts in western Iran in 2015. Epidemiology and health. 2017;39:e2017023.

Moran LJ, McNaughton SA, Sui Z, Cramp C, Deussen AR, Grivell RM, et al. The characterisation of overweight and obese women who are under reporting energy intake during pregnancy. BMC pregnancy and childbirth. 2018;18(1):204.

More SJ. Improving the quality of reporting in veterinary journals: how far do we need to go with reporting guidelines? Veterinary journal (London, England : 1997). 2010;184(3):249-50.

Moreno SG, Sutton AJ, Ades AE, Cooper NJ, Abrams KR. Adjusting for publication biases across similar interventions performed well when compared with gold standard data. Journal of clinical epidemiology. 2011;64(11):1230-41.

Moreno SG, Sutton AJ, Ades AE, Stanley TD, Abrams KR, Peters JL, et al. Assessment of regression-based methods to adjust for publication bias through a comprehensive simulation study. BMC medical research methodology. 2009;9:2.

Moreno SG, Sutton AJ, Turner EH, Abrams KR, Cooper NJ, Palmer TM, et al. Novel methods to deal with publication biases: secondary analysis of antidepressant trials in the FDA trial registry database and related journal publications. BMJ (Clinical research ed). 2009;339:b2981.

Moreno-Torres LA, Ventura-Alfaro CE. Underreporting trends of occupational illnesses in Mexico. Journal of occupational health. 2018;60(1):85-8.

Moretti F, Chellini E, Baretti S, Santini MG, Rosati GV, Comodo N. Estimate of underreporting of infectious diseases through a sentinel network of pediatricians in the area of local health unit of Florence. Epidemiologia e prevenzione. 2000;24(5):224-7.

Moricke E, Buitelaar JK, Rommelse NNJ. Do We Need Multiple Informants When Assessing Autistic Traits? The Degree of Report Bias on Offspring, Self, and Spouse Ratings. *Journal of autism and developmental disorders*. 2016;46(1):164-75.

Moride Y, Haramburu F, Requejo AA, Begaud B. Under-reporting of adverse drug reactions in general practice. *British journal of clinical pharmacology*. 1997;43(2):177-81.

Morleo M, Woolfall K, Dedman D, Mukherjee R, Bellis MA, Cook PA. Under-reporting of foetal alcohol spectrum disorders: an analysis of hospital episode statistics. *BMC pediatrics*. 2011;11:14.

Morral AR, McCaffrey D, Iguchi MY. Hardcore drug users claim to be occasional users: drug use frequency underreporting. *Drug and alcohol dependence*. 2000;57(3):193-202.

Morrison M, Cope V, Murray M. The underreporting of medication errors: A retrospective and comparative root cause analysis in an acute mental health unit over a 3-year period. *International journal of mental health nursing*. 2018;27(6):1719-28.

Morrison PJ. Underreporting of pedestrian accidents. *BMJ (Clinical research ed)*. 1992;304(6829):779-80.

Morrow-Tlucak M, Ernhart CB, Sokol RJ, Martier S, Ager J. Underreporting of alcohol use in pregnancy: relationship to alcohol problem history. *Alcoholism, clinical and experimental research*. 1989;13(3):399-401.

Mortensen M, Woo P. An underreported complication of laryngeal microdebrider: vocal fold web and granuloma: a case report. *The Laryngoscope*. 2009;119(9):1848-50.

Moseson H, Massaquoi M, Dehlendorf C, Bawo L, Dahn B, Zolia Y, et al. Reducing under-reporting of stigmatized health events using the List Experiment: results from a randomized, population-based study of abortion in Liberia. *International journal of epidemiology*. 2015;44(6):1951-8.

Mosleh IM, Geith E, Natsheh L, Abdul-Dayem M, Abotteen N. Cutaneous leishmaniasis in the Jordanian side of the Jordan Valley: severe under-reporting and consequences on public health management. *Tropical medicine & international health : TM & IH*. 2008;13(6):855-60.

Mousavi-Roknabadi RS, Momennasab M, Askarian M, Haghshenas A, Marjadi B. Causes of medical errors and its under-reporting amongst pediatric nurses in Iran: a qualitative study. *International journal for quality in health care : journal of the International Society for Quality in Health Care*. 2018.

Mubayi A, Castillo-Chavez C, Chowell G, Kribs-Zaleta C, Ali Siddiqui N, Kumar N, et al. Transmission dynamics and underreporting of Kala-azar in the Indian state of Bihar. *Journal of theoretical biology*. 2010;262(1):177-85.

Mucci B. The selective reporting of X-ray films from the Accident and Emergency Department. *Injury*. 1983;14(4):343-4.

Muchtar E, Raanani P, Yeshurun M, Shpilberg O, Magen-Nativ H. Myeloma in scar tissue--an underreported phenomenon or an emerging entity in the novel agents' era? A single center series. *Acta haematologica*. 2014;132(1):39-44.

Mueller KF, Meerpohl JJ, Briel M, Antes G, von Elm E, Lang B, et al. Detecting, quantifying and adjusting for publication bias in meta-analyses: protocol of a systematic review on methods. *Systematic reviews*. 2013;2:60.

Muhlheim LS, Allison DB, Heshka S, Heymsfield SB. Do unsuccessful dieters intentionally underreport food intake? *The International journal of eating disorders*. 1998;24(3):259-66.

Mullaney L, O'Higgins AC, Cawley S, Doolan A, McCartney D, Turner MJ. An estimation of periconceptional under-reporting of dietary energy intake. *Journal of public health (Oxford, England)*. 2015;37(4):728-36.

Muller KF, Briel M, D'Amario A, Kleijnen J, Marusic A, Wager E, et al. Defining publication bias: protocol for a systematic review of highly cited articles and proposal for a new framework. *Systematic reviews*. 2013;2:34.

Munafo MR, Clark TG, Flint J. Assessing publication bias in genetic association studies: evidence from a recent meta-analysis. *Psychiatry research*. 2004;129(1):39-44.

Munafo MR, Matheson IJ, Flint J. Association of the DRD2 gene Taq1A polymorphism and alcoholism: a meta-analysis of case-control studies and evidence of publication bias. *Molecular psychiatry*. 2007;12(5):454-61.

Mungra A, van Bokhoven SC, Florie J, van Kantén RW, van Roosmalen J, Kanhai HH. Reproductive age mortality survey to study under-reporting of maternal mortality in Surinam. *European journal of obstetrics, gynecology, and reproductive biology*. 1998;77(1):37-9.

Murad MH, Chu H, Lin L, Wang Z. The effect of publication bias magnitude and direction on the certainty in evidence. *BMJ evidence-based medicine*. 2018;23(3):84-6.

Murakami K, Livingstone MBE, Okubo H, Sasaki S. Younger and older ages and obesity are associated with energy intake underreporting but not overreporting in Japanese boys and girls aged 1-19 years: the National Health and Nutrition Survey. *Nutrition research (New York, NY)*. 2016;36(10):1153-61.

Murakami K, Livingstone MBE. Greenhouse gas emissions of self-selected diets in the UK and their association with diet quality: is energy under-reporting a problem? *Nutrition journal*. 2018;17(1):27.

Murray JM, Zaunders JJ, Koelsch KK, Natarajan V, Badralmaa Y, McBride K, et al. Short communication: HIV blips while on antiretroviral therapy can indicate consistently detectable viral levels due to assay underreporting. *AIDS research and human retroviruses*. 2013;29(12):1621-5.

Myers MG, Stergiou GS. Reporting bias: Achilles' heel of home blood pressure monitoring. *Journal of the American Society of Hypertension : JASH*. 2014;8(5):350-7.

Myers MG. Reporting bias in self-measurement of blood pressure. *Blood pressure monitoring*. 2001;6(4):181-3.

Myhre JB, Johansen AMW, Hjartaker A, Andersen LF. Relative validation of a pre-coded food diary in a group of Norwegian adults - Comparison of underreporters and acceptable reporters. *PloS one*. 2018;13(8):e0202907.

Nagao M, Iinuma Y, Igawa J, Matsumura Y, Shirano M, Matsushima A, et al. Accidental exposures to blood and body fluid in the operation room and the issue of underreporting. *American journal of infection control*. 2009;37(7):541-4.

Nakahara S, Wakai S. Underreporting of traffic injuries involving children in Japan. *Injury prevention : journal of the International Society for Child and Adolescent Injury Prevention*. 2001;7(3):242-4.

Nakayama T. Under-reporting of attributable risk and reporting of the risk ratio in epidemiologic literature. *Epidemiology (Cambridge, Mass)*. 2000;11(3):366-7.

Nankervis H, Baibergenova A, Williams HC, Thomas KS. Prospective registration and outcome-reporting bias in randomized controlled trials of eczema treatments: a systematic review. *The Journal of investigative dermatology*. 2012;132(12):2727-34.

Narayanaswamy N, Narra S, Nair RR, Saini DK, Kondaiah P, Govindaraju T. Stimuli-responsive colorimetric and NIR fluorescence combination probe for selective reporting of cellular hydrogen peroxide. *Chemical science*. 2016;7(4):2832-41.

Narvios AB, Lichtiger B, Neumann JL. Underreporting of minor transfusion reactions in cancer patients. *MedGenMed : Medscape general medicine*. 2004;6(2):17.

Nassir Ghaemi S, Shirzadi AA, Filkowski M. Publication bias and the pharmaceutical industry: the case of lamotrigine in bipolar disorder. *Medscape journal of medicine*. 2008;10(9):211.

Nawijn F, Ham WHW, Houwert RM, Groenwold RHH, Hietbrink F, Smeeing DPJ. Quality of reporting of systematic reviews and meta-analyses in emergency medicine based on the PRISMA statement. *BMC emergency medicine*. 2019;19(1):19.

Negrini S. Another form of publication bias: the unpublished "everyday" clinical researches. *European journal of physical and rehabilitation medicine*. 2011;47(4):531-2.

Nelsing S, Nielsen TL, Nielsen JO. Underreporting and follow up of exposure to blood among Danish physicians. *Ugeskrift for laeger*. 1997;159(42):6211-5.

Nelson JP. Estimating the price elasticity of beer: meta-analysis of data with heterogeneity, dependence, and publication bias. *Journal of health economics*. 2014;33:180-7.

Nelson JP. Meta-analysis of alcohol price and income elasticities - with corrections for publication bias. *Health economics review*. 2013;3(1):17.

Neto HJC, Rosario NA, Westphal GLC, Riedi CA, Santos HLBS. Allergic conjunctivitis in asthmatic children: as common as underreported. *Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology*. 2010;105(5):399-400.

Neumann PJ, Stone PW, Chapman RH, Sandberg EA, Bell CM. The quality of reporting in published cost-utility analyses, 1976-1997. *Annals of internal medicine*. 2000;132(12):964-72.

Nevo A, Mano R, Sivan B, Ben-Meir D. Missed Torsion of the Spermatic Cord: A Common yet Underreported Event. *Urology*. 2017;102:202-6.

Newcombe RG. Towards a reduction in publication bias. *British medical journal (Clinical research ed)*. 1987;295(6599):656-9.

Nguyen NP, Frank C, Moltz CC, Vos P, Smith HJ, Bhamidipati PV, et al. Aspiration rate following chemoradiation for head and neck cancer: an underreported occurrence. *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*. 2006;80(3):302-6.

Nicaise V, Marshall S, Ainsworth BE. Domain-specific physical activity and self-report bias among low-income Latinas living in San Diego County. *Journal of physical activity & health*. 2011;8(7):881-90.

Niemeyer H, Musch J, Pietrowsky R. Publication bias in meta-analyses of the efficacy of psychotherapeutic interventions for schizophrenia. *Schizophrenia research*. 2012;138(2-3):103-12.

Niemeyer H, Musch J, Pietrowsky R. Publication bias in meta-analyses of the efficacy of psychotherapeutic interventions for depression. *Journal of consulting and clinical psychology*. 2013;81(1):58-74.

Ning J, Chen Y, Piao J. Maximum likelihood estimation and EM algorithm of Copas-like selection model for publication bias correction. *Biostatistics (Oxford, England)*. 2017;18(3):495-504.

Nissen SB, Magidson T, Gross K, Bergstrom CT. Publication bias and the canonization of false facts. *eLife*. 2016;5.

Nissen SE. Biomarkers in cardiovascular medicine: the shame of publication bias. *JAMA internal medicine*. 2013;173(8):671-2.

Nkgudi B, Robertson KA, Volmink J, Mayosi BM. Notification of rheumatic fever in South Africa -- evidence for underreporting by health care professionals and administrators. *South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde*. 2006;96(3):206-8.

Noble DJ, Pronovost PJ. Underreporting of patient safety incidents reduces health care's ability to quantify and accurately measure harm reduction. *Journal of patient safety*. 2010;6(4):247-50.

Noe C. Underreporting of blood exposure incidents: a worrying situation among nursing students. *Recherche en soins infirmiers*. 2015(123):49-65.

Nolting A, Perleth M, Langer G, Meerpohl JJ, Gartlehner G, Kaminski-Hartenthaler A, et al. GRADE guidelines: 5. Rating the quality of evidence: publication bias. *Zeitschrift fur Evidenz, Fortbildung und Qualitat im Gesundheitswesen*. 2012;106(9):670-6.

Noor M, Beutler E. Acquired sulfhemoglobinemia. An underreported diagnosis? *The Western journal of medicine*. 1998;169(6):386-9.

Nordberg M. ED staffs underreport assaults by patients. *Emergency medical services*. 1993;22(6):63-4.

Norris SL, Moher D, Reeves BC, Shea B, Loke Y, Garner S, et al. Issues relating to selective reporting when including non-randomized studies in systematic reviews on the effects of healthcare interventions. *Research synthesis methods*. 2013;4(1):36-47.

Norwood MS, Hughes JP, Amico KR. The validity of self-reported behaviors: methods for estimating underreporting of risk behaviors. *Annals of epidemiology*. 2016;26(9):612-8.e2.

Novotny JA, Rumpler WV, Riddick H, Hebert JR, Rhodes D, Judd JT, et al. Personality characteristics as predictors of underreporting of energy intake on 24-hour dietary recall interviews. *Journal of the American Dietetic Association*. 2003;103(9):1146-51.

Ntala C, Birmipili P, Worth A, Anderson NH, Sheikh A. The quality of reporting of randomised controlled trials in asthma: a systematic review. *Primary care respiratory journal : journal of the General Practice Airways Group*. 2013;22(4):417-24.

Ntala C, Birmipili P, Worth A, Anderson NH, Sheikh A. The quality of reporting of randomised controlled trials in asthma: systematic review protocol. *Primary care respiratory journal : journal of the General Practice Airways Group*. 2013;22(1):PS1-8.

Nunes JACC, Sampaio CLS, Barros F, Leduc AOHC. Plastic debris collars: An underreported stressor in tropical reef fishes. *Marine pollution bulletin*. 2018;129(2):802-5.

Nusinovici S, Monestiez P, Seegers H, Beaudeau F, Fourichon C. Using animal performance data to evidence the under-reporting of case herds during an epizootic: application to an outbreak of bluetongue in cattle. *PloS one*. 2014;9(6):e100137.

O'Brien SJ, Gillespie IA, Sivanesan MA, Elson R, Hughes C, Adak GK. Publication bias in foodborne outbreaks of infectious intestinal disease and its

implications for evidence-based food policy. England and Wales 1992-2003. *Epidemiology and infection*. 2006;134(4):667-74.

Obsomer V, Boucher I, Delmee M. Dutch borders impervious to ticks or Lyme borreliosis underreporting in Belgium. *Acta clinica Belgica*. 2013;68(5):390.

O'Connor SJ. Peer review: problem or solution in relation to publication bias, transparency and the internationalisation of scientific research outputs? *European journal of cancer care*. 2012;21(6):701-2.

O'Donnell CJ, Glynn RJ, Field TS, Averbach R, Satterfield S, Friesenger GC, 2nd, et al. Misclassification and under-reporting of acute myocardial infarction by elderly persons: implications for community-based observational studies and clinical trials. *Journal of clinical epidemiology*. 1999;52(8):745-51.

Ogunbiyi SO, Morris-Stiff G, Sheridan WG. Giant mature cyst formation following mesh repair of hernias: an underreported complication? *Hernia : the journal of hernias and abdominal wall surgery*. 2004;8(2):166-8.

Okike K, Kocher MS, Mehlman CT, Heckman JD, Bhandari M. Publication bias in orthopaedic research: an analysis of scientific factors associated with publication in the *Journal of Bone and Joint Surgery (American Volume)*. *The Journal of bone and joint surgery American volume*. 2008;90(3):595-601.

Okubo H, Sasaki S. Underreporting of energy intake among Japanese women aged 18-20 years and its association with reported nutrient and food group intakes. *Public health nutrition*. 2004;7(7):911-7.

Olafsdottir AS, Thorsdottir I, Gunnarsdottir I, Thorgeirsdottir H, Steingrimsdottir L. Comparison of women's diet assessed by FFQs and 24-hour recalls with and without underreporters: associations with biomarkers. *Annals of nutrition & metabolism*. 2006;50(5):450-60.

Oldham JM, Adegunsoye A, Khera S, Lafond E, Noth I, Strek ME, et al. Underreporting of Interstitial Lung Abnormalities on Lung Cancer Screening Computed Tomography. *Annals of the American Thoracic Society*. 2018;15(6):764-6.

Olendzki BC, Ma Y, Hebert JR, Pagoto SL, Merriam PA, Rosal MC, et al. Underreporting of energy intake and associated factors in a Latino population at risk of developing type 2 diabetes. *Journal of the American Dietetic Association*. 2008;108(6):1003-8.

Olsen KE, Sandler SG. Febrile neutropenia contributes to underreporting of potential septic platelet transfusion reactions. *Vox sanguinis*. 1996;70(2):118.

Olson CM, Rennie D, Cook D, Dickersin K, Flanagan A, Hogan JW, et al. Publication bias in editorial decision making. *Jama*. 2002;287(21):2825-8.

Olson CM. Publication bias. *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*. 1994;1(3):207-9.

Omundsen M, Zargar H, Purchas S. Giant cyst: an underreported complication of hernia mesh repairs? *ANZ journal of surgery*. 2008;78(9):822-3.

Onishi A, Furukawa TA. Publication bias is underreported in systematic reviews published in high-impact-factor journals: metaepidemiologic study. *Journal of clinical epidemiology*. 2014;67(12):1320-6.

Orcholski L, Luke A, Plange-Rhule J, Bovet P, Forrester TE, Lambert EV, et al. Under-reporting of dietary energy intake in five populations of the African diaspora. *The British journal of nutrition*. 2015;113(3):464-72.

Ospina MB, Kelly K, Klassen TP, Rowe BH. Publication bias of randomized controlled trials in emergency medicine. *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*. 2006;13(1):102-8.

Ospovat NT. 'A jaw for a tooth'--a biased report. *South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde*. 2009;99(8):546, 8.

Ottaiano A, Castello G, Ascierto PA. Evidence of publication bias in clinical trials of biotherapies for solid tumors. *Cancer*. 2005;103(4):653.

Ottervanger JP, Valkenburg HA, Grobbee DE, Stricker BHC. Differences in perceived and presented adverse drug reactions in general practice. *Journal of Clinical Epidemiology*. 51:9. 795-799. 1998.

Overman MJ, Ellis LM, Joffe S. Ethics and the Underreporting of Research Biopsy Findings in Clinical Trials. *JAMA oncology*. 2018;4(8):1041-2.

Paapsi K, Magi M, Mikkel S, Saks K, Aareleid T, Innos K. The impact of under-reporting of cases on the estimates of childhood cancer incidence and survival in Estonia. *European journal of cancer prevention : the official journal of the European Cancer Prevention Organisation (ECP)*. 2017;26 Joining forces for better cancer registration in Europe:S147-S52.

Pacheco AG, Saraceni V, Tuboi SH, Lauria LM, Moulton LH, Faulhaber JC, et al. Estimating the extent of underreporting of mortality among HIV-infected individuals in Rio de Janeiro, Brazil. *AIDS research and human retroviruses*. 2011;27(1):25-8.

Pacheco M, Sentell T, Katz AR. Under-reporting of pelvic inflammatory disease in Hawaii: a comparison of state surveillance and hospitalization data. *Journal of community health*. 2014;39(2):336-8.

Pacheco O, Martinez M, Alarcon A, Bonilla M, Caycedo A, Valbuena T, et al. Estimation of underreporting of Chikungunya virus infection cases in Girardot, Colombia, from November, 2014, to May, 2015. *Biomedica : revista del Instituto Nacional de Salud*. 2017;37(4):507-15.

Pagano MB, Dunbar NM, Tinmouth A, Apolseth TO, Lozano M, Cohn CS, et al. A methodological review of the quality of reporting of surveys in transfusion medicine. *Transfusion*. 2018;58(11):2720-7.

Page MJ, Forbes A, Chau M, Green SE, McKenzie JE. Investigation of bias in meta-analyses due to selective inclusion of trial effect estimates: empirical study. *BMJ open*. 2016;6(4):e011863.

Page MJ, Higgins JPT. Rethinking the assessment of risk of bias due to selective reporting: a cross-sectional study. *Systematic reviews*. 2016;5(1):108.

Page MJ, McKenzie JE, Forbes A. Many scenarios exist for selective inclusion and reporting of results in randomized trials and systematic reviews. *Journal of clinical epidemiology*. 2013;66(5):524-37.

Page MJ, McKenzie JE, Green SE, Forbes AB. An empirical investigation of the potential impact of selective inclusion of results in systematic reviews of interventions: study protocol. *Systematic reviews*. 2013;2:21.

Page MJ, McKenzie JE, Higgins JPT. Tools for assessing risk of reporting biases in studies and syntheses of studies: a systematic review. *BMJ open*. 2018;8(3):e019703.

Page MJ, McKenzie JE, Kirkham J, Dwan K, Kramer S, Green S, et al. Bias due to selective inclusion and reporting of outcomes and analyses in systematic reviews of randomised trials of healthcare interventions. *The Cochrane database of systematic reviews*. 2014(10):MR000035.

Palamar JJ, Keyes K, Cleland CM. Underreporting of ecstasy use among high school seniors in the US. *Drug and alcohol dependence*. 2016;165:279-82.

Palamar JJ, Martins SS, Su MK, Ompad DC. Self-reported use of novel psychoactive substances in a US nationally representative survey: Prevalence, correlates, and a call for new survey methods to prevent underreporting. *Drug and alcohol dependence*. 2015;156:112-9.

Palazzo F, Kaulback KR, Wagner JL, Lindenbaum GA, Cohen MJ. Port site metastasis of B-cell lymphoma: a first occurrence or an underreported complication? *Surgical laparoscopy, endoscopy & percutaneous techniques*. 2007;17(6):554-5.

Palma Perez S, Delgado Rodriguez M. Practical considerations on detection of publication bias. *Gaceta sanitaria*. 2006;20 Suppl 3:10-6.

Palma S, Delgado-Rodriguez M. Assessment of publication bias in meta-analyses of cardiovascular diseases. *Journal of epidemiology and community health*. 2005;59(10):864-9.

Palmer AR. Detecting Publication Bias in Meta-analyses: A Case Study of Fluctuating Asymmetry and Sexual Selection. *The American naturalist*. 1999;154(2):220-33.

Palys KE, Berger VW. Re: Quality of reporting of modern randomized controlled trials in medical oncology: a systematic review. *Journal of the National Cancer Institute*. 2013;105(3):244-5.

Papageorgiou SN, Dimitraki D, Coolidge T, Kotsanos N. Publication bias & small-study effects in pediatric dentistry meta-analyses. *The journal of evidence-based dental practice*. 2015;15(1):8-24.

Papageorgiou SN, Papadopoulos MA, Athanasiou AE. Assessing small study effects and publication bias in orthodontic meta-analyses: a meta-epidemiological study. *Clinical oral investigations*. 2014;18(4):1031-44.

Papathanasiou AA, Zintzaras E. Assessing the quality of reporting of observational studies in cancer. *Annals of epidemiology*. 2010;20(1):67-73.

Paranjothy B, Shunmugam M, Azuara-Blanco A. The quality of reporting of diagnostic accuracy studies in glaucoma using scanning laser polarimetry. *Journal of glaucoma*. 2007;16(8):670-5.

Parekh-Bhurke S, Kwok CS, Pang C, Hooper L, Loke YK, Ryder JJ, et al. Uptake of methods to deal with publication bias in systematic reviews has increased over time, but there is still much scope for improvement. *Journal of clinical epidemiology*. 2011;64(4):349-57.

Park HA, Lee JS, Kuller LH. Underreporting of dietary intake by body mass index in premenopausal women participating in the Healthy Women Study. *Nutrition research and practice*. 2007;1(3):231-6.

Park SH, Ahn S, Hong N, Park JH, Hwang S-s, Lee KH. Quality of reporting noninferiority/similarity in research studies of diagnostic imaging. *Radiology*. 2014;270(1):241-7.

Parmley WW. Publication bias. *Journal of the American College of Cardiology*. 1994;24(5):1424-5.

Parry J. WHO is worried that China is under-reporting SARS. *BMJ (Clinical research ed)*. 2003;326(7399):1110.

Parseghian CM, Raghav K, Wolff RA, Ensor J, Jr., Yao J, Ellis LM, et al. Underreporting of Research Biopsies from Clinical Trials in Oncology. *Clinical cancer research : an official journal of the American Association for Cancer Research*. 2017;23(21):6450-7.

Partsinevelou A, Zintzaras E. Quality of reporting of randomized controlled trials in polycystic ovary syndrome. *Trials*. 2009;10:106.

Patel MX, Collins S, Hellier J, Bhatia G, Murray RM. The quality of reporting of phase II and III trials for new antipsychotics: a systematic review. *Psychological medicine*. 2015;45(3):467-79.

Patil S, Geedipally SR, Lord D. Analysis of crash severities using nested logit model--accounting for the underreporting of crashes. *Accident; analysis and prevention*. 2012;45:646-53.

Patrignani A, Palmieri G, Ciampani N, Moretti V, Mariani A, Racca L. Under-reporting of adverse drug reactions, a problem that also involves medicines subject to additional monitoring. Preliminary data from a single-center experience on novel oral anticoagulants. *Giornale italiano di cardiologia (2006)*. 2018;19(1):54-61.

Paulson K, Saeed M, Mills J, Cuvelier GDE, Kumar R, Raymond C, et al. Publication bias is present in blood and marrow transplantation: an analysis of abstracts at an international meeting. *Blood*. 2011;118(25):6698-701.

Pearn J, Chalmers I. Is selective reporting of well-designed clinical research unethical as well as unscientific? *Nederlands tijdschrift voor geneeskunde*. 1996;140(4):220-1.

Pearson M, Peters J. Outcome reporting bias in evaluations of public health interventions: evidence of impact and the potential role of a study register. *Journal of epidemiology and community health*. 2012;66(4):286-9.

Pechansky F. Commentary on Bodin & Strandberg (2011): Scepticism, publication bias and a grain of salt--do we already know how to evaluate prevention programmes? *Addiction (Abingdon, England)*. 2011;106(12):2144-5.

Peciola S, Himanen S-L, Knight A, Dibue-Adjei M, Rainesalo S, Peltola J. Under-reporting of nocturnal seizures using video-based home monitoring: a case study on the evaluation of the effect of vagal nerve stimulation. *Epileptic disorders : international epilepsy journal with videotape*. 2018;20(6):535-40.

Pecoraro V, Banzi R, Trenti T. Quality of reporting of diagnostic test accuracy studies in medical laboratory journals. *Clinical chemistry and laboratory medicine*. 2016;54(11):e319-e21.

Peeters B, Brandt I, Desmet K, Hartevelde CL, Kieffer D. Hb Melusine and Hb Athens-Georgia: potentially underreported in the Belgian population? Four cases demonstrating the lack of detection using common CE-HPLC methods either for glycated hemoglobin (HbA1C) analysis or Hb variant screening. *Acta clinica Belgica*. 2016;71(6):458-61.

Peinemann F, McGauran N, Sauerland S, Lange S. Negative pressure wound therapy: potential publication bias caused by lack of access to unpublished study results data. *BMC medical research methodology*. 2008;8:4.

Penel N, Adenis A. Publication biases and phase II trials investigating anticancer targeted therapies. *Investigational new drugs*. 2009;27(3):287-8.

Pengel LHM, Barcena L, Morris PJ. The quality of reporting of randomized controlled trials in solid organ transplantation. *Transplant international : official journal of the European Society for Organ Transplantation*. 2009;22(4):377-84.

Penman A. Excess mortality due to diabetes in Mississippi and the estimated extent of underreporting on death certificates. *Journal of the Mississippi State Medical Association*. 2003;44(10):319-25.

Pereira TV, Rudnicki M, Cheung BMY, Baum L, Yamada Y, Oliveira PSL, et al. Three endothelial nitric oxide (NOS3) gene polymorphisms in hypertensive and normotensive individuals: meta-analysis of 53 studies reveals evidence of publication bias. *Journal of hypertension*. 2007;25(9):1763-74.

Perez EA, Suman VJ. Lack of publication bias related to results from trastuzumab study. *Lancet (London, England)*. 2008;372(9639):626-7.

Perez Garcia M, Figueras A. The lack of knowledge about the voluntary reporting system of adverse drug reactions as a major cause of underreporting: direct survey among health professionals. *Pharmacoepidemiology and drug safety*. 2011;20(12):1295-302.

Perez-Stable EJ, Marin BV, Marin G, Brody DJ, Benowitz NL. Apparent underreporting of cigarette consumption among Mexican American smokers. *American journal of public health*. 1990;80(9):1057-61.

Periyasamy N, Lynch CA, Dharmaratne SD, Nuggeoda D, Ostbye T. Under reporting of road traffic injuries in the district of Kandy, Sri Lanka. *BMJ open*. 2013;3(11):e003640.

Perneger TV, Combescure C. The distribution of P-values in medical research articles suggested selective reporting associated with statistical significance. *Journal of clinical epidemiology*. 2017;87:70-7.

Peron J, Pond GR, Gan HK, Chen EX, Almufti R, Maillet D, et al. Quality of reporting of modern randomized controlled trials in medical oncology: a systematic review. *Journal of the National Cancer Institute*. 2012;104(13):982-9.

Perry T. Selective reporting of pharmaceutical data leads major medical journals to change editorial policy. *Cjem*. 2001;3(4):321-2.

Pervaiz M, Gilbert R, Ali N. The Prevalence and Underreporting of Needlestick Injuries among Dental Healthcare Workers in Pakistan: A Systematic Review. *International journal of dentistry*. 2018;2018:9609038.

Petchey R, Avery T. Fundholding and prescribing. Patient dissatisfaction may be underreported. *BMJ (Clinical research ed)*. 1995;311(6997):128; author reply -9.

Peters J, Mengersen K. Selective reporting of adjusted estimates in observational epidemiology studies: reasons and implications for meta-analyses. *Evaluation & the health professions*. 2008;31(4):370-89.

Peters JL, Sutton AJ, Jones DR, Abrams KR, Rushton L. Comparison of two methods to detect publication bias in meta-analysis. *Jama*. 2006;295(6):676-80.

Peters JL, Sutton AJ, Jones DR, Abrams KR, Rushton L. Contour-enhanced meta-analysis funnel plots help distinguish publication bias from other causes of asymmetry. *Journal of clinical epidemiology*. 2008;61(10):991-6.

Peters JL, Sutton AJ, Jones DR, Abrams KR, Rushton L. Performance of the trim and fill method in the presence of publication bias and between-study heterogeneity. *Statistics in medicine*. 2007;26(25):4544-62.

Peters JPM, Hooft L, Grolman W, Stegeman I. Assessment of the quality of reporting of randomised controlled trials in otorhinolaryngologic literature - adherence to the CONSORT statement. *PloS one*. 2015;10(3):e0122328.

Petticrew M, Egan M, Thomson H, Hamilton V, Kunkler R, Roberts H. Publication bias in qualitative research: what becomes of qualitative research presented at conferences? *Journal of epidemiology and community health*. 2008;62(6):552-4.

Petticrew M. Diagoras of Melos (500 BC): an early analyst of publication bias. *Lancet (London, England)*. 1998;352(9139):1558.

Pfeiffer T, Bertram L, Ioannidis JPA. Quantifying selective reporting and the Proteus phenomenon for multiple datasets with similar bias. *PloS one*. 2011;6(3):e18362.

Pfrimer K, Vilela M, Resende CM, Scagliusi FB, Marchini JS, Lima NKC, et al. Under-reporting of food intake and body fatness in independent older people: a doubly labelled water study. *Age and ageing*. 2015;44(1):103-8.

Pham B, Platt R, McAuley L, Klassen TP, Moher D. Is there a "best" way to detect and minimize publication bias? An empirical evaluation. *Evaluation & the health professions*. 2001;24(2):109-25.

Phillips B, Shaw J, Turco L, McDonald D, Carey J, Balters M, et al. Traumatic pulmonary pseudocyst: An underreported entity. *Injury*. 2017;48(2):214-20.

Phillips CV. Publication bias in situ. *BMC medical research methodology*. 2004;4:20.

Piao J, Liu Y, Chen Y, Ning J. Copas-like selection model to correct publication bias in systematic review of diagnostic test studies. *Statistical methods in medical research*. 2018;962280218791602.

Pickar JH. Do journals have a publication bias? *Maturitas*. 2007;57(1):16-9.

Pickett JT, Roche SP. Questionable, Objectionable or Criminal? Public Opinion on Data Fraud and Selective Reporting in Science. *Science and engineering ethics*. 2018;24(1):151-71.

Pikholz C, Swinburn B, Metcalf P. Under-reporting of energy intake in the 1997 National Nutrition Survey. *The New Zealand medical journal*. 2004;117(1202):U1079.

Pilling R, Long V, Hobson R, Schweiger M. Ophthalmia neonatorum: a vanishing disease or underreported notification? *Eye (London, England)*. 2009;23(9):1879-80.

Pinheiro RS, Andrade VdL, Oliveira GPd. Underreporting of tuberculosis in the Information System on Notifiable Diseases (SINAN): primary default and case detection from additional data sources using probabilistic record linkage. *Cadernos de saude publica*. 2012;28(8):1559-68.

Pirracchio R, Resche-Rigon M, Chevret S, Journois D. Do simple screening statistical tools help to detect reporting bias? *Annals of intensive care*. 2013;3(1):29.

Pirracchio R, Resche-Rigon M, Chevret S, Journois D. Simple screening statistical tools to detect reporting bias: when should we ask for raw data? *Critical care (London, England)*. 2013;17(3):142.

Pitak-Arnnp P, Sader R, Rapidis AD, Dhanuthai K, Bauer U, Herve C, et al. Publication bias in oral and maxillofacial surgery journals: an observation on published controlled trials. *Journal of cranio-maxillo-facial surgery : official publication of the European Association for Cranio-Maxillo-Facial Surgery*. 2010;38(1):4-10.

Pjetursson BE, Zwahlen M, Lang NP. Quality of reporting of clinical studies to assess and compare performance of implant-supported restorations. *Journal of clinical periodontology*. 2012;39 Suppl 12:139-59.

Podolsky DK, Nagarkar PA, Reed WG, Rohrich RJ. Public reporting of patient safety metrics: ready or not? *Plastic and Reconstructive Surgery*. 134:6. 981e-5e. 2014.

Poflee SV, Bode AN, Chavarkar S, Umap PS. Myofibromatosis: Utility of fine needle aspiration cytology in the diagnosis of an underreported entity. *Journal of cytology*. 2017;34(1):53-5.

Polivy J, Herman CP, Trottier K, Sidhu R. Who are you trying to fool: does weight underreporting by dieters reflect self-protection or self-presentation? *Health psychology review*. 2014;8(3):319-38.

Pollock DA, Boyle CA, DeStefano F, Moyer LA, Kirk ML. Underreporting of alcohol-related mortality on death certificates of young US Army veterans. *Jama*. 1987;258(3):345-8.

Polychronopoulou A, Pandis N, Eliades T. Assessment of publication bias in dental specialty journals. *The journal of evidence-based dental practice*. 2010;10(4):207-11.

Polyzos NP, Valachis A, Patavoukas E, Papanikolaou EG, Messinis IE, Tarlatzis BC, et al. Publication bias in reproductive medicine: from the European Society of Human Reproduction and Embryology annual meeting to publication. *Human reproduction (Oxford, England)*. 2011;26(6):1371-6.

Pomerleau J, Ostbye T, Bright-See E. Potential underreporting of energy intake in the Ontario Health Survey and its relationship with nutrient and food intakes. *European journal of epidemiology*. 1999;15(6):553-7.

Poolman RW, Struijs PAA, Krips R, Sierevelt IN, Lutz KH, Bhandari M. Does a "Level I Evidence" rating imply high quality of reporting in orthopaedic randomised controlled trials? *BMC medical research methodology*. 2006;6:44.

Poorolajal J, Haghdoost AA, Mahmoodi M, Majdzadeh R, Nasser-Moghaddam S, Fotouhi A. Capture-recapture method for assessing publication bias. *Journal of*

research in medical sciences : the official journal of Isfahan University of Medical Sciences. 2010;15(2):107-15.

Poppitt SD, Swann D, Black AE, Prentice AM. Assessment of selective under-reporting of food intake by both obese and non-obese women in a metabolic facility. *International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity*. 1998;22(4):303-11.

Porru S, Carta A, Toninelli E, Bozzola G, Arici C. Reducing the underreporting of lung cancer attributable to occupation: outcomes from a hospital-based systematic search in Northern Italy. *International archives of occupational and environmental health*. 2016;89(6):981-9.

Post RM. Biased public health perspective on depression treatment: media bias on publication bias. *The American journal of psychiatry*. 2009;166(8):934-5.

Poster DS. Procarbazine-prochlorperazine interaction: an underreported phenomenon. *Journal of medicine*. 1978;9(6):519-24.

Potterat JJ, Rothenberg RB. Sexual network data help assess putative STD reporting bias. *Sexually transmitted diseases*. 1997;24(9):552-3.

Pouwels KB, Widyakusuma NN, Groenwold RHH, Hak E. Quality of reporting of confounding remained suboptimal after the STROBE guideline. *Journal of clinical epidemiology*. 2016;69:217-24.

Pradhipasen M, Chareonkul C, Nitnara S, Taweedej J, Pamonprawat A. The underreporting of childhood diarrhea in Thailand. *The Southeast Asian journal of tropical medicine and public health*. 1997;28(2):391-4.

Prady SL, Richmond SJ, Morton VM, Macpherson H. A systematic evaluation of the impact of STRICTA and CONSORT recommendations on quality of reporting for acupuncture trials. *PloS one*. 2008;3(2):e1577.

Prah P, Copas AJ, Mercer CH, Clifton S, Erens B, Phelps A, et al. Consistency in reporting sensitive sexual behaviours in Britain: change in reporting bias in the second and third National Surveys of Sexual Attitudes and Lifestyles (Natsal-2 and Natsal-3). *Sexually transmitted infections*. 2014;90(2):90-3.

Pransky G, Snyder T, Dembe A, Himmelstein J. Under-reporting of work-related disorders in the workplace: a case study and review of the literature. *Ergonomics*. 1999;42(1):171-82.

Prasad K. Publication bias perpetuates use of ineffective drugs in stroke. *International journal of stroke : official journal of the International Stroke Society*. 2009;4(3):183-4.

Pratoomsoot C, Sruamsiri R, Dilokthornsakul P, Chaiyakunapruk N. Strengthening Evidence Base for Traditional Medicine in Asean, Quality of Reporting of Randomised Controlled Trials of Herbal Interventions in Asean Plus Six Countries: A Systematic Review. *Value in health : the journal of the International Society for Pharmacoeconomics and Outcomes Research*. 2014;17(7):A545.

Pratoomsoot C, Sruamsiri R, Dilokthornsakul P, Chaiyakunapruk N. Quality of reporting of randomised controlled trials of herbal interventions in ASEAN Plus Six Countries: a systematic review. *PloS one*. 2015;10(1):e108681.

Preston C, Ashby D, Smyth R. Adjusting for publication bias: modelling the selection process. *Journal of evaluation in clinical practice*. 2004;10(2):313-22.

Preston NW. Publication bias via suppressed expert conflict. *Lancet (London, England)*. 1993;341(8851):1031.

Preston SH, Fishman E, Stokes A. Effects of categorization and self-report bias on estimates of the association between obesity and mortality. *Annals of epidemiology*. 2015;25(12):907-11.e1-2.

Prete PE, Phan N. Musculoskeletal disease in very elderly nursing home patients: does under-reporting exist? *Clinical performance and quality health care*. 1996;4(2):90-5.

Pringle KC. Underreporting of postsplenectomy sepsis. *Archives of surgery (Chicago, Ill : 1960)*. 1981;116(8):1101.

Probst TM, Brubaker TL, Barsotti A. Organizational injury rate underreporting: the moderating effect of organizational safety climate. *The Journal of applied psychology*. 2008;93(5):1147-54.

Probst TM, Estrada AX. Accident under-reporting among employees: testing the moderating influence of psychological safety climate and supervisor enforcement of safety practices. *Accident; analysis and prevention*. 2010;42(5):1438-44.

Probst TM, Petitta L, Barbaranelli C. Comparing recall vs. recognition measures of accident under-reporting: A two-country examination. *Accident; analysis and prevention*. 2017;106:1-9.

Probst TM. Organizational safety climate and supervisor safety enforcement: Multilevel explorations of the causes of accident underreporting. *The Journal of applied psychology*. 2015;100(6):1899-907.

Protic D, Vujasinovic-Stupar N, Bukumiric Z, Pavlov-Dolijanovic S, Baltic S, Mutavdzin S, et al. Profile of rheumatology patients willing to report adverse drug reactions: bias from selective reporting. *Patient preference and adherence*. 2016;10:115-21.

Provecho YM, Gaspe MS, del Pilar Fernandez M, Enriquez GF, Weinberg D, Gurtler RE. The peri-urban interface and house infestation with *Triatoma infestans* in the Argentine Chaco: an underreported process? *Memorias do Instituto Oswaldo Cruz*. 2014;109(7):923-34.

Prytz H, Anderson H. Underreporting of alcohol-related mortality from cirrhosis is declining in Sweden and Denmark. *Scandinavian journal of gastroenterology*. 1988;23(9):1035-43.

Psarros G, Skjong R, Eide MS. Under-reporting of maritime accidents. *Accident; analysis and prevention*. 2010;42(2):619-25.

Pulcini C, Tebano G, Mutters NT, Tacconelli E, Cambau E, Kahlmeter G, et al. Selective reporting of antibiotic susceptibility test results in European countries: an ESCMID cross-sectional survey. *International journal of antimicrobial agents*. 2017;49(2):162-6.

Pumphrey RS, Davis S. Under-reporting of antibiotic anaphylaxis may put patients at risk. *Lancet (London, England)*. 1999;353(9159):1157-8.

Quesada KR, Novais PFS, Detregiachi CRP, Barbalho SM, Rasera I, Jr., Oliveira MRM. Comparative analysis of approaches for assessing energy intake

underreporting by female bariatric surgery candidates. *Journal of the American College of Nutrition*. 2014;33(2):155-62.

Quickert S, Reuken PA, Rose M, Boden K, Bruns T. Acute Hepatitis E is an Underreported Cause of Severe Acute Liver Injury. *Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association*. 2019;17(5):1004-6.

Quillen K. Hemolysis from platelet transfusion: call to action for an underreported reaction. *Transfusion*. 2012;52(10):2072-4.

Rabelo ALA, Keller VN, Pilati R, Wicherts JM. No Effect of Weight on Judgments of Importance in the Moral Domain and Evidence of Publication Bias from a Meta-Analysis. *PloS one*. 2015;10(8):e0134808.

Rabi DM, Lewin AM, Brown GE, Edwards AL, Johnson JA, Ghali WA. Lay media reporting of rosiglitazone risk: extent, messaging and quality of reporting. *Cardiovascular diabetology*. 2009;8:40.

Rabinerson D, Glezerman M. West Nile virus infection during pregnancy--a rare or an underreported disease? *Harefuah*. 2009;148(1):42-4, 87.

Radon K, Schulze A, Nowak D. Inverse association between farm animal contact and respiratory allergies in adulthood: protection, underreporting or selection? *Allergy*. 2006;61(4):443-6.

Raf L, Netz P. How to avoid injuries in connection with surgery? Perioperative nerve injuries are probably underreported. *Lakartidningen*. 1999;96(16):1951-8.

Raghav KPS, Mahajan S, Yao JC, Hobbs BP, Berry DA, Pentz RD, et al. From Protocols to Publications: A Study in Selective Reporting of Outcomes in Randomized Trials in Oncology. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. 2015;33(31):3583-90.

Rahmanipour S, Kumar S, Simon-Kumar R. Underreporting sexual violence among 'ethnic'1 migrant women: perspectives from Aotearoa/New Zealand. *Culture, health & sexuality*. 2019:1-16.

Rajasekharan S, Vandenbulcke J, Martens L. An assessment of the quality of reporting randomised controlled trials published in paediatric dentistry journals. *European archives of paediatric dentistry : official journal of the European Academy of Paediatric Dentistry*. 2015;16(2):181-9.

Rama KRBS, Poovali S, Apsingi S. Quality of reporting of orthopaedic diagnostic accuracy studies is suboptimal. *Clinical orthopaedics and related research*. 2006;447:237-46.

Ramos-Hryb AB, Harris C, Aighewi O, Lino-de-Oliveira C. How would publication bias distort the estimated effect size of prototypic antidepressants in the forced swim test? *Neuroscience and biobehavioral reviews*. 2018;92:192-4.

Ranger A, Chaudhary N, Matic D. Craniosynostosis involving the squamous temporal sutures: a rare and possibly underreported etiology for cranial vault asymmetry. *The Journal of craniofacial surgery*. 2010;21(5):1547-50.

Ranjan M, Mahadevan A, Prasad C, Sommana S, Susarla Krishna S. Kummell's disease - uncommon or underreported disease: A clinicopathological account of a case and review of literature. *Journal of neurosciences in rural practice*. 2013;4(4):439-42.

Rao A, Bruck K, Methven S, Evans R, Stel VS, Jager KJ, et al. Quality of Reporting and Study Design of CKD Cohort Studies Assessing Mortality in the Elderly Before and After STROBE: A Systematic Review. *PloS one*. 2016;11(5):e0155078.

Rao A, Tobin K, Davey-Rothwell M, Latkin CA. Social Desirability Bias and Prevalence of Sexual HIV Risk Behaviors Among People Who Use Drugs in Baltimore, Maryland: Implications for Identifying Individuals Prone to Underreporting Sexual Risk Behaviors. *AIDS and behavior*. 2017;21(7):2207-14.

Rashid A, Agha MA, Minhas S, Nepal B, Nusrat N. Steps taken to alleviate under-reporting of transfusion reactions at a public sector hospital in Pakistan. *Blood research*. 2016;51(4):290-2.

Rasmussen K, Schroll J, Gotzsche PC, Lundh A. Under-reporting of conflicts of interest among trialists: a cross-sectional study. *Journal of the Royal Society of Medicine*. 2015;108(3):101-7.

Rayi A, Thompson S, Gloss D, Malhotra K. Reporting bias in completed epilepsy intervention trials: A cross-sectional analysis. *Epilepsy research*. 2018;143:1-6.

Redulla R. Bias because of selective inclusion and reporting of outcomes and analyses in systematic reviews of randomized trials of healthcare interventions. *International journal of evidence-based healthcare*. 2016;14(4):183-5.

Reed SB, Kirsch I, Wickless C, Moffitt KH, Taren P. Reporting biases in hypnosis: suggestion or compliance? *Journal of abnormal psychology*. 1996;105(1):142-5.

Reers Y, Idelevich EA, Patkau H, Sauerland MC, Tafelski S, Nachtigall I, et al. Multiplex PCR assay underreports true bloodstream infections with coagulase-negative staphylococci in hematological patients with febrile neutropenia. *Diagnostic microbiology and infectious disease*. 2016;85(4):413-5.

Reid EK, Tejani AM, Huan LN, Egan G, O'Sullivan C, Mayhew AD, et al. Managing the incidence of selective reporting bias: a survey of Cochrane review groups. *Systematic reviews*. 2015;4:85.

Reidenberg MM. Decreasing publication bias. *Clinical pharmacology and therapeutics*. 1998;63(1):1-3.

Reiffel JA. Selective Reporting: Silent Atrial Fibrillation and Cryptogenic Strokes. *The American journal of medicine*. 2017;130(9):e403.

Rennie D, Flanagan A. Publication bias. The triumph of hope over experience. *Jama*. 1992;267(3):411-2.

Rennie D, Flanagan A. Research on peer review and biomedical publication: furthering the quest to improve the quality of reporting. *Jama*. 2014;311(10):1019-20.

Rennie KL, Coward A, Jebb SA. Estimating under-reporting of energy intake in dietary surveys using an individualised method. *The British journal of nutrition*. 2007;97(6):1169-76.

Rennie KL, Jebb SA, Wright A, Coward WA. Secular trends in under-reporting in young people. *The British journal of nutrition*. 2005;93(2):241-7.

Rennie KL, Siervo M, Jebb SA. Can self-reported dieting and dietary restraint identify underreporters of energy intake in dietary surveys? *Journal of the American Dietetic Association*. 2006;106(10):1667-72.

Reynolds T. Eliminating publication bias: the effect of negative trial results. *Journal of the National Cancer Institute*. 2000;92(9):682.

Rezaeian M. Reducing publication bias in biomedical research: reviewing and registering protocol with a suitable journal. *Journal of clinical epidemiology*. 2016;69:248-9.

Richards D. Quality of reporting randomised controlled trials in dental public health. *Evidence-based dentistry*. 2011;12(2):54.

Richards SM, Burrett JA. A proposal for reducing the effect of one of many causes of publication bias. *Trials*. 2013;14:41.

Richter RR, Sebelski CA, Austin TM. The Quality of Reporting of Abstracts in Physical Therapy Literature is Suboptimal: Cross-Sectional, Bibliographic Analysis. *American journal of physical medicine & rehabilitation*. 2016;95(9):673-84.

Riechelmann RP, Dounaevskaia V, Krzyzanowska MK. Quality of reporting primary outcomes in phase II cancer trials. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. 2008;26(33):5486-8.

Riediger ND, Bombak AE, Mudryj A, Bensley J, Ankomah S. A systematic search and qualitative review of reporting bias of lifestyle interventions in randomized controlled trials of diabetes prevention and management. *Nutrition journal*. 2018;17(1):83.

Riemer CA, El-Azhary RA, Wu KL, Strand JJ, Lehman JS. Underreported use of palliative care and patient-reported outcome measures to address reduced quality of life in patients with calciphylaxis: a systematic review. *The British journal of dermatology*. 2017;177(6):1510-8.

Rifai N, Altman DG, Bossuyt PM. Reporting bias in diagnostic and prognostic studies: time for action. *Clinical chemistry*. 2008;54(7):1101-3.

Rios LP, Oduyungbo A, Moitri MO, Rahman MO, Thabane L. Quality of reporting of randomized controlled trials in general endocrinology literature. *The Journal of clinical endocrinology and metabolism*. 2008;93(10):3810-6.

Rique J, da Silva MDP. Study of the under-reporting of AIDS cases in Alagoas (Brazil), 1999-2005. *Ciencia & saude coletiva*. 2011;16(2):599-603.

Rising K, Bacchetti P, Bero L. Reporting bias in drug trials submitted to the Food and Drug Administration: review of publication and presentation. *PLoS medicine*. 2008;5(11):e217; discussion e.

Rispler D, Sara J, Davenport L, Mills B, Iskra C. Underreporting of complementary and alternative medicine use among arthritis patients in an orthopedic clinic. *American journal of orthopedics (Belle Mead, NJ)*. 2011;40(5):E92-5.

Ritchie SJ. Publication bias in a recent meta-analysis on breastfeeding and IQ. *Acta paediatrica (Oslo, Norway : 1992)*. 2017;106(2):345.

Rivara FP, Cummings P. Publication bias: the problem and some suggestions. *Archives of pediatrics & adolescent medicine*. 2002;156(5):424-5.

Riviere S, Penven E, Cadeac-Birman H, Roquelaure Y, Valenty M. Underreporting of musculoskeletal disorders in 10 regions in France in 2009. *American journal of industrial medicine*. 2014;57(10):1174-80.

Rivoirard R, Bourmaud A, Oriol M, Tinquaut F, Mery B, Langrand-Escure J, et al. Quality of reporting in oncology studies: A systematic analysis of literature reviews and prospects. *Critical reviews in oncology/hematology*. 2017;112:179-89.

Roberto G, Zanoni G. Disease-related adverse events following non-live vaccines: investigation of a newly described reporting bias through the analysis of the WHO Global ICSR Database, VigiBase. *Vaccine*. 2014;32(26):3328-35.

Roberts J. Trial Registration, Transparency, and Selective Reporting: Let's Get Clear About What Is Needed in Headache Medicine. *Headache*. 2016;56(1):3-7.

Roberts JL, Shamseer L. Transparency, reproducibility, and validation: raising the quality of reporting at the Journal of Neuro-Ophthalmology. *Journal of neuro-ophthalmology : the official journal of the North American Neuro-Ophthalmology Society*. 2015;35(1):3-5.

Roberts L. Federal Report on Acid Rain Draws Criticism: A new Report, showing minimal effects from acid rain, has scientists grumbling about selective reporting. *Science* (New York, NY). 1987;237(4821):1404-6.

Rocchetti I, Taruscio D, Pierannunzio D. Modeling delay to diagnosis for amyotrophic lateral sclerosis: under reporting and incidence estimates. *BMC neurology*. 2012;12:160.

Rocchietta I, Nisand D. A review assessing the quality of reporting of risk factor research in implant dentistry using smoking, diabetes and periodontitis and implant loss as an outcome: critical aspects in design and outcome assessment. *Journal of clinical periodontology*. 2012;39 Suppl 12:114-21.

Rochon PA, Mashari A, Cohen A, Misra A, Laxer D, Streiner DL, et al. The inclusion of minority groups in clinical trials: problems of under representation and under reporting of data. *Accountability in research*. 2004;11(3-4):215-23.

Rockwell S, Kimler BF, Moulder JE. Publishing negative results: the problem of publication bias. *Radiation research*. 2006;165(6):623-5.

Rodrigues FB, Ferreira JJ. Overall Survival and Causes of Death in Neurodegeneration-An Overlooked and Underreported Theme. *JAMA neurology*. 2017;74(11):1379.

Rodriguez Blas C, Sendra Gutierrez JM, Regidor Poyatos E, Gutierrez Fisac JL, Inigo Martinez J. Proposed method to estimate underreporting of induced abortion in Spain. *Gaceta sanitaria*. 1994;8(41):63-70.

Roest AM, de Jonge P, Williams CD, de Vries YA, Schoevers RA, Turner EH. Reporting Bias in Clinical Trials Investigating the Efficacy of Second-Generation Antidepressants in the Treatment of Anxiety Disorders: A Report of 2 Meta-analyses. *JAMA psychiatry*. 2015;72(5):500-10.

Roeyen G, Jansen M, Chapelle T, Bracke B, Hartman V, Ysebaert D, et al. Diabetes mellitus and pre-diabetes are frequently undiagnosed and underreported in patients referred for pancreatic surgery. A prospective observational study. *Pancreatology : official journal of the International Association of Pancreatology (IAP)* [et al]. 2016;16(4):671-6.

Rohner E, Grabik M, Tonia T, Juni P, Petavy F, Pignatti F, et al. Does access to clinical study reports from the European Medicines Agency reduce reporting biases? A systematic review and meta-analysis of randomized controlled trials on the effect of erythropoiesis-stimulating agents in cancer patients. *PloS one*. 2017;12(12):e0189309.

Roht LH, Vernon SW, Weir FW, Pier SM, Sullivan P, Reed LJ. Community exposure to hazardous waste disposal sites: assessing reporting bias. *American journal of epidemiology*. 1985;122(3):418-33.

Rolston KVI, Bodey GP, Safdar A. Polymicrobial infection in patients with cancer: an underappreciated and underreported entity. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*. 2007;45(2):228-33.

Romero JP, Benito-Leon J, Louis ED, Bermejo-Pareja F. Under reporting of dementia deaths on death certificates: a systematic review of population-based cohort studies. *Journal of Alzheimer's disease : JAD*. 2014;41(1):213-21.

Romero JP, Benito-Leon J, Mitchell AJ, Trincado R, Bermejo-Pareja F. Under reporting of dementia deaths on death certificates using data from a population-based study (NEDICES). *Journal of Alzheimer's disease : JAD*. 2014;39(4):741-8.

Rooban T, Krishnaswamy NR, Ahmed VKS. Gingival tissue proliferation into the tooth following iatrogenic miniscrew insertion: A newer underreported complication. *Indian journal of dental research : official publication of Indian Society for Dental Research*. 2017;28(2):198-202.

Rookus MA. Reporting bias in case-control studies on induced abortion and breast cancer. *American journal of epidemiology*. 2000;151(12):1144-7.

Room R. Dealing with publication bias: two possible steps forward. *Drug and alcohol review*. 2008;27(4):343-4.

Roona M. Science, politics and publication bias. *Drug and alcohol review*. 2008;27(4):349-51; discussion 52-6.

Roposch A, Moreau NM, Uleryk E, Doria AS. Developmental dysplasia of the hip: quality of reporting of diagnostic accuracy for US. *Radiology*. 2006;241(3):854-60.

Rose B. Response to 'Bipartite talus - a probably underreported skeletal variation'. *Foot and ankle surgery : official journal of the European Society of Foot and Ankle Surgeons*. 2013;19(4):296.

Rosenman KD, Gardiner JC, Wang J, Biddle J, Hogan A, Reilly MJ, Roberts K, Welch E. Why most workers with occupational repetitive trauma do not file for workers' compensation. *Journal Of Occupational and Environmental Medicine*. 421. 25-34. DOI: 10.1097/00043764-200001000-00008. 2000.

Rosenthal R, Weber WP, Marti WR, Misteli H, Reck S, Dangel M, et al. Surveillance of surgical site infections by surgeons: biased underreporting or useful epidemiological data? *The Journal of hospital infection*. 2010;75(3):178-82.

Ross A, Cooper C, Gray H, Umberham B, Vassar M. Assessment of Publication Bias and Systematic Review Findings in Top-Ranked Otolaryngology Journals. *JAMA otolaryngology-- head & neck surgery*. 2018.

Rossier C, Senderowicz L, Soura A. Do natural methods count? underreporting of natural contraception in urban Burkina Faso. *Studies in family planning*. 2014;45(2):171-82.

Rossow I, Pape H. Another example on publication bias in research on drug education: a commentary to Jim McCambridge's article. *Drug and alcohol review*. 2008;27(4):348-9; discussion 52-6.

Rota MC, Cawthorne A, Bella A, Caporali MG, Filia A, D'Ancona F, et al. Capture-recapture estimation of underreporting of legionellosis cases to the National Legionellosis Register: Italy 2002. *Epidemiology and infection*. 2007;135(6):1030-6.

Roth MA, Aitsi-Selmi A, Wardle H, Mindell J. Under-reporting of tobacco use among Bangladeshi women in England. *Journal of public health (Oxford, England)*. 2009;31(3):326-34.

Rothstein HR, Bushman BJ. Publication bias in psychological science: comment on Ferguson and Brannick (2012). *Psychological methods*. 2012;17(1):129-36.

Roukis TS. Selection and Publication Bias Color Interpretation. *The Journal of foot and ankle surgery : official publication of the American College of Foot and Ankle Surgeons*. 2015;54(6):1213-4.

Roux P, Cohen J, Lascoux-Combe C, Sogni P, Winnock M, Salmon-Ceron D, et al. Determinants of the underreporting of alcohol consumption by HIV/HCV co-infected patients during face-to-face medical interviews: the role of the physician. *Drug and alcohol dependence*. 2011;116(1-3):228-32.

Rowland ML. Reporting bias in height and weight data. *Statistical bulletin (Metropolitan Life Insurance Company : 1984)*. 1989;70(2):2-11.

Rozendaal AM, Luijsterburg AJM, Ongkosuwito EM, van den Boogaard MJH, de Vries E, Hovius SER, et al. Delayed diagnosis and underreporting of congenital anomalies associated with oral clefts in the Netherlands: a national validation study. *Journal of plastic, reconstructive & aesthetic surgery : JPRAS*. 2012;65(6):780-90.

Rucker G, Schwarzer G, Carpenter J. Arcsine test for publication bias in meta-analyses with binary outcomes. *Statistics in medicine*. 2008;27(5):746-63.

Ruiz-Grosso P, Osada J, Hoppe W, Pedraz B, Vega-Dienstmaier J. Under reporting of depressive disorders. *Revista peruana de medicina experimental y salud publica*. 2011;28(4):697.

Rushing CJ, Ivankiv R, Bullock NM, Rogers DE, Spinner SM. Onychomatricoma: A Rare and Potentially Underreported Tumor of the Nail Matrix. *The Journal of foot and ankle surgery : official publication of the American College of Foot and Ankle Surgeons*. 2017;56(5):1095-8.

Rusting RR. Baby switching: an underreported problem that needs to be recognized. *Journal of healthcare protection management : publication of the International Association for Hospital Security*. 2000;17(1):89-100.

Rutegard M, Kverneng Hultberg D, Angenete E, Lydrup M-L. Substantial underreporting of anastomotic leakage after anterior resection for rectal cancer in the Swedish Colorectal Cancer Registry. *Acta oncologica (Stockholm, Sweden)*. 2017;56(12):1741-5.

Rutishauser IH. Is dietary underreporting macronutrient specific? *European journal of clinical nutrition*. 1995;49(3):219-20.

Ryan AM, Nguyen H-HD. Publication bias and stereotype threat research: A reply to Zigerell. *The Journal of applied psychology*. 2017;102(8):1169-77.

Ryan M, Faix D, Smith T, Gray GC. Conflicts of Interest and Publication Bias. *Journal of occupational and environmental medicine*. 2016;58(9):e338.

Saber AA, Shoar S, Khoursheed M. Intra-thoracic Sleeve Migration (ITSM): an Underreported Phenomenon After Laparoscopic Sleeve Gastrectomy. *Obesity surgery*. 2017;27(8):1917-23.

Sackoff J, Kline J, Kinney A, Grunebaum A. Cocaine use in obstetric patients underreported. *American journal of public health*. 1992;82(7):1043.

Sacristan JA, Bolanos E, Hernandez JM, Soto J, Galende I. Publication bias in health economic studies. *Pharmacoeconomics*. 1997;11(3):289-92.

Sadoghi P, Wilkins R, Bisson LJ. Publication bias in meta-analysis studies: letter to the editor. *The American journal of sports medicine*. 2012;40(10):NP27; author reply NP.

Saeed M, Paulson K, Lambert P, Szwajcer D, Seftel M. Publication bias in blood and marrow transplantation. *Biology of blood and marrow transplantation : journal of the American Society for Blood and Marrow Transplantation*. 2011;17(6):930-4.

Saini P, Loke YK, Gamble C, Altman DG, Williamson PR, Kirkham JJ. Selective reporting bias of harm outcomes within studies: findings from a cohort of systematic reviews. *BMJ (Clinical research ed)*. 2014;349:g6501.

Saklani A, Naguib N, Tanner N, Moorhouse S, Davies CE, Masoud AG. Internal herniation following laparoscopic left hemicolectomy: an underreported event. *Journal of laparoendoscopic & advanced surgical techniques Part A*. 2012;22(5):496-500.

Salami K, Alkayed K. Publication bias in pediatric hematology and oncology: analysis of abstracts presented at the annual meeting of the American Society of Pediatric Hematology and Oncology. *Pediatric hematology and oncology*. 2013;30(3):165-9.

Salehiniya H. Improving the quality of reporting a cohort study. *Archives of Iranian medicine*. 2013;16(8):495.

Salifu M, Ackaah W. Under-reporting of road traffic crash data in Ghana. *International journal of injury control and safety promotion*. 2012;19(4):331-9.

Salle A, Ryan M, Ritz P. Underreporting of food intake in obese diabetic and nondiabetic patients. *Diabetes care*. 2006;29(12):2726-7.

Samaras K, Kelly PJ, Campbell LV. Dietary underreporting is prevalent in middle-aged British women and is not related to adiposity (percentage body fat). *International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity*. 1999;23(8):881-8.

Sampson HH, Rutty GN. Under-reporting of suicide in South Yorkshire (West): a retrospective study of suicide and open verdicts returned by HM Coroner, 1992-1997. *Journal of clinical forensic medicine*. 1999;6(2):72-6.

Sampson NR, Price CE, Kassem J, Doan J, Hussein J. "We're Just Sitting Ducks": Recurrent Household Flooding as An Underreported Environmental Health Threat in Detroit's Changing Climate. *International journal of environmental research and public health*. 2018;16(1).

Samuel JC, Sankhulani E, Qureshi JS, Baloyi P, Thupi C, Lee CN, et al. Under-reporting of road traffic mortality in developing countries: application of a capture-recapture statistical model to refine mortality estimates. *PloS one*. 2012;7(2):e31091.

Samuelsson E, Hagg S, Backstrom M, Granberg K, Mjorndal T. Thrombosis caused by oracl contraceptives. Underreporting to the adverse effects registry. *Lakartidningen*. 1996;93(37):3117-8, 21-4.

Sanchez-Thorin JC, Cortes MC, Montenegro M, Villate N. The quality of reporting of randomized clinical trials published in *Ophthalmology*. *Ophthalmology*. 2001;108(2):410-5.

Sanchez-Tojar A, Nakagawa S, Sanchez-Fortun M, Martin DA, Ramani S, Girndt A, et al. Meta-analysis challenges a textbook example of status signalling and demonstrates publication bias. *eLife*. 2018;7.

Sando IC, Malay S, Chung KC. Analysis of publication bias in the literature for distal radius fracture. *The Journal of hand surgery*. 2013;38(5):927-34.e5.

Santos ML, Coeli CM, Batista JdAL, Braga MC, Albuquerque MdFPMd. Factors associated with underreporting of tuberculosis based on data from Sinan Aids and Sinan TB. *Revista brasileira de epidemiologia = Brazilian journal of epidemiology*. 2018;21:e180019.

Saravanan G, Hara T, Yoshikawa H, Yamashita Y, Ueda S, Kobayashi K, et al. Post-synthesis dispersion of metal nanoparticles by poly(amidoamine) dendrimers: size-selective inclusion, water solubilization, and improved catalytic performance. *Chemical communications (Cambridge, England)*. 2012;48(60):7441-3.

Sargeant JM, Saint-Onge J, Valcour J, Thompson A, Elgie R, Snedeker K, et al. Quality of reporting in clinical trials of preharvest food safety interventions and associations with treatment effect. *Foodborne pathogens and disease*. 2009;6(8):989-99.

Sargeant JM, Thompson A, Valcour J, Elgie R, Saint-Onge J, Marcynuk P, et al. Quality of reporting of clinical trials of dogs and cats and associations with treatment effects. *Journal of veterinary internal medicine*. 2010;24(1):44-50.

Saric F, Barcot O, Puljak L. Risk of bias assessments for selective reporting were inadequate in the majority of Cochrane reviews. *Journal of clinical epidemiology*. 2019;112:53-8.

Sarode GS, Sarode SC, Patil S. Under reporting of Cancer Data in India? The journal of contemporary dental practice. 2017;18(2):81-2.

Sartor CE, Bucholz KK, Nelson EC, Madden PAF, Lynskey MT, Heath AC. Reporting bias in the association between age at first alcohol use and heavy episodic drinking. Alcoholism, clinical and experimental research. 2011;35(8):1418-25.

Sataloff RT. Quality of reporting in randomized trials. Ear, nose, & throat journal. 2010;89(4):150.

Saunders JB. Publication bias in addiction research. Drug and alcohol review. 2007;26(5):459-61.

Sauzet O, Kleine M, Menzel-Begemann A, Exner A-K. Longitudinal randomised controlled trials in rehabilitation post-stroke: a systematic review on the quality of reporting and use of baseline outcome values. BMC neurology. 2015;15:99.

Savage RD, Rosella LC, Brown KA, Khan K, Crowcroft NS. Underreporting of hepatitis A in non-endemic countries: a systematic review and meta-analysis. BMC infectious diseases. 2016;16:281.

Saveleva E, Selinski S. Meta-analyses with binary outcomes: how many studies need to be omitted to detect a publication bias? Journal of toxicology and environmental health Part A. 2008;71(13-14):845-50.

Savica R, Mielke MM. Overall Survival and Causes of Death in Neurodegeneration-An Overlooked and Underreported Theme-Reply. JAMA neurology. 2017;74(11):1379-80.

Savithra P, Nagesh LS. Have CONSORT guidelines improved the quality of reporting of randomised controlled trials published in public health dentistry journals? Oral health & preventive dentistry. 2013;11(2):95-103.

Scagliusi FB, Ferriolli E, Lancha AH, Jr. Underreporting of energy intake in developing nations. Nutrition reviews. 2006;64(7 Pt 1):319-30.

Scagliusi FB, Ferriolli E, Pfrimer K, Laureano C, Cunha CS, Gualano B, et al. Underreporting of energy intake in Brazilian women varies according to dietary

assessment: a cross-sectional study using doubly labeled water. *Journal of the American Dietetic Association*. 2008;108(12):2031-40.

Scagliusi FB, Ferriolli E, Pfrimer K, Laureano C, Cunha CSF, Gualano B, et al. Under-reporting of energy intake is more prevalent in a healthy dietary pattern cluster. *The British journal of nutrition*. 2008;100(5):1060-8.

Scagliusi FB, Polacow VO, Artioli GG, Benatti FB, Lancha AH, Jr. Selective underreporting of energy intake in women: magnitude, determinants, and effect of training. *Journal of the American Dietetic Association*. 2003;103(10):1306-13.

Scales CD, Jr., Norris RD, Keitz SA, Peterson BL, Preminger GM, Vieweg J, et al. A critical assessment of the quality of reporting of randomized, controlled trials in the urology literature. *The Journal of urology*. 2007;177(3):1090-4; discussion 4-5.

Schauenburg H. Literature is subject to publication bias. *Deutsches Arzteblatt international*. 2009;106(18):320; author reply 1-2.

Schenk AM, Cooper-Lehki C, Keelan CM, Fremouw WJ. Underreporting of bestiality among juvenile sex offenders: polygraph versus self-report. *Journal of forensic sciences*. 2014;59(2):540-2.

Scher A, Epstein R, Sadeh A, Tirosh E, Lavie P. Toddlers' sleep and temperament: reporting bias or a valid link? A research note. *Journal of child psychology and psychiatry, and allied disciplines*. 1992;33(7):1249-54.

Schielke A, Takla A, von Kries R, Wichmann O, Hellenbrand W. Marked Underreporting of Pertussis Requiring Hospitalization in Infants as Estimated by Capture-Recapture Methodology, Germany, 2013-2015. *The Pediatric infectious disease journal*. 2018;37(2):119-25.

Schiffman EK, McLaughlin C, Ray JAE, Kemperman MM, Hinckley AF, Friedlander HG, et al. Underreporting of Lyme and Other Tick-Borne Diseases in Residents of a High-Incidence County, Minnesota, 2009. *Zoonoses and public health*. 2018;65(2):230-7.

Schiller P, Burchardi N, Niestroj M, Kieser M. Quality of reporting of clinical non-inferiority and equivalence randomised trials--update and extension. *Trials*. 2012;13:214.

Schluchter MD. Publication bias and heterogeneity in the relationship between systolic blood pressure, birth weight, and catch-up growth--a meta analysis. *Journal of hypertension*. 2003;21(2):273-9.

Schmid B, Silva NNd. Estimation of live birth underreporting with a capture-recapture method, Sergipe, Northeastern Brazil. *Revista de saude publica*. 2011;45(6):1088-98.

Schmid CH. Discussion of "quantifying publication bias in meta-analysis" by Lin et al. *Biometrics*. 2018;74(3):797-9.

Schmid CH. Outcome Reporting Bias: A Pervasive Problem in Published Meta-analyses. *American journal of kidney diseases : the official journal of the National Kidney Foundation*. 2017;69(2):172-4.

Schmid SM, Lapaire O, Huang DJ, Jurgens FE, Guth U. Cannabinoid hyperemesis syndrome: an underreported entity causing nausea and vomiting of pregnancy. *Archives of gynecology and obstetrics*. 2011;284(5):1095-7.

Schmidt AF, Groenwold RHH, van Delden JJM, van der Does Y, Klungel OH, Roes KCB, et al. Justification of exclusion criteria was underreported in a review of cardiovascular trials. *Journal of clinical epidemiology*. 2014;67(6):635-44.

Schmitt MH. Publication bias in nursing research. *Research in nursing & health*. 1998;21(5):383-4.

Schneck A. Examining publication bias-a simulation-based evaluation of statistical tests on publication bias. *PeerJ*. 2017;5:e4115.

Schoffski P, Garfield DH, Hercbergs A, Wolter P. Ongoing under-reporting of clinically relevant safety data in phase II studies of tyrosine kinase inhibitors. *British journal of cancer*. 2010;102(8):1309-10; author reply 11.

Scholey JM, Harrison JE. Publication bias: raising awareness of a potential problem in dental research. *British dental journal*. 2003;194(5):235-7.

Scholten JN, de Vlas SJ, Zaleskis R. Under-reporting of HIV infection among cohorts of TB patients in the WHO European Region, 2003-2004. *The*

international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease. 2008;12(3):85-91.

Scholten JN, de Vlas SJ, Zaleskis R. Under-reporting of HIV infection among cohorts of TB patients in the WHO European Region, 2003-2004. The international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease. 2008;12(3 Suppl 1):85-91.

Schork MA. Publication bias and meta analysis. Journal of hypertension. 2003;21(2):243-5.

Schott G, Pachl H, Ludwig W-D. The relation between publication bias and clinical trials funding. Zeitschrift fur Evidenz, Fortbildung und Qualitat im Gesundheitswesen. 2010;104(4):314-22.

Schreiner AJ, Schmidutz F, Ateschrang A, Ihle C, Stockle U, Ochs BG, et al. Periprosthetic tibial fractures in total knee arthroplasty - an outcome analysis of a challenging and underreported surgical issue. BMC musculoskeletal disorders. 2018;19(1):323.

Schuch FB, Vancampfort D, Richards J, Rosenbaum S, Ward PB, Stubbs B. Exercise as a treatment for depression: A meta-analysis adjusting for publication bias. Journal of psychiatric research. 2016;77:42-51.

Schuch FB, Vancampfort D, Rosenbaum S, Richards J, Ward PB, Veronese N, et al. Exercise for depression in older adults: a meta-analysis of randomized controlled trials adjusting for publication bias. Revista brasileira de psiquiatria (Sao Paulo, Brazil : 1999). 2016;38(3):247-54.

Schuitmaker N, Van Roosmalen J, Dekker G, Van Dongen P, Van Geijn H, Gravenhorst JB. Underreporting of maternal mortality in The Netherlands. Obstetrics and gynecology. 1997;90(1):78-82.

Schulte JM, Martich FA, Schmid GP. Chancroid in the United States, 1981-1990: evidence for underreporting of cases. MMWR CDC surveillance summaries : Morbidity and mortality weekly report CDC surveillance summaries. 1992;41(3):57-61.

Schumacher J. Testicular neoplasia of horses: an underreported condition. *Equine veterinary journal*. 1999;31(4):270-2.

Schuur JD, Justice A. Measuring quality of care in syncope: case definition affects reported electrocardiogram use but does not bias reporting. *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*. 2009;16(1):40-9.

Schwartz D, Rosendahl J. Addressing publication bias. *Psychotherapie, Psychosomatik, medizinische Psychologie*. 2013;63(9-10):398-9.

Schwarzer G, Antes G, Schumacher M. A test for publication bias in meta-analysis with sparse binary data. *Statistics in medicine*. 2007;26(4):721-33.

Schwarzer G, Antes G, Schumacher M. Inflation of type I error rate in two statistical tests for the detection of publication bias in meta-analyses with binary outcomes. *Statistics in medicine*. 2002;21(17):2465-77.

Schwarzer G, Rucker G. Statistical methods for detecting and adjusting for publication bias. *Zeitschrift für Evidenz, Fortbildung und Qualität im Gesundheitswesen*. 2010;104(4):306-13.

Sciortino S, Vassar M, Radetsky M, Knudson MM. San Francisco pedestrian injury surveillance: mapping, under-reporting, and injury severity in police and hospital records. *Accident; analysis and prevention*. 2005;37(6):1102-13.

Sclar DA, Lieberman PL. Anaphylaxis: underdiagnosed, underreported, and undertreated. *The American journal of medicine*. 2014;127(1 Suppl):S1-5.

Sea VRF, Cruz ACR, Gurgel RQ, Nunes BTD, Silva EVP, Dolabella SS, et al. Underreporting of Dengue-4 in Brazil due to low sensitivity of the NS1 Ag test in routine control programs. *PloS one*. 2013;8(5):e64056.

Sedgwick P. Meta-analysis: testing for reporting bias. *BMJ (Clinical research ed)*. 2015;350:g7857.

Sedgwick P. What is publication bias in a meta-analysis? *BMJ (Clinical research ed)*. 2015;351:h4419.

Seitz CS, Berens N, Brocker E-B, Trautmann A. Leg ulceration in rheumatoid arthritis--an underreported multicausal complication with considerable morbidity: analysis of thirty-six patients and review of the literature. *Dermatology (Basel, Switzerland)*. 2010;220(3):268-73.

Sellbom M, Bagby RM. Validity of the MMPI-2-RF (restructured form) L-r and K-r scales in detecting underreporting in clinical and nonclinical samples. *Psychological assessment*. 2008;20(4):370-6.

Sellbom M, Ben-Porath YS, Graham JR, Arbisi PA, Bagby RM. Susceptibility of the MMPI-2 clinical, restructured clinical (RC), and content scales to overreporting and underreporting. *Assessment*. 2005;12(1):79-85.

Selman TJ, Morris RK, Zamora J, Khan KS. The quality of reporting of primary test accuracy studies in obstetrics and gynaecology: application of the STARD criteria. *BMC women's health*. 2011;11:8.

Sen S, Prabhu M. Reporting bias in industry-supported medication trials presented at the American Psychiatric Association meeting. *Journal of clinical psychopharmacology*. 2012;32(3):435.

Sena ES, van der Worp HB, Bath PMW, Howells DW, Macleod MR. Publication bias in reports of animal stroke studies leads to major overstatement of efficacy. *PLoS biology*. 2010;8(3):e1000344.

Seneviratne U, Cook M, D'ÂSouza W. Epileptiform K-Complexes and Sleep Spindles: An Underreported Phenomenon in Genetic Generalized Epilepsy. *Journal of clinical neurophysiology : official publication of the American Electroencephalographic Society*. 2016;33(2):156-61.

Seng P, Traore M, Lagier J-C, Lavigne J-P, Sotto A, Drancourt M, et al. *Staphylococcus lugdunensis*: An Underreported Pathogen in Osteomyelitis. *The Journal of foot and ankle surgery : official publication of the American College of Foot and Ankle Surgeons*. 2017;56(2):412-3.

Senn S. Misunderstanding publication bias: editors are not blameless after all. *F1000Research*. 2012;1:59.

Serra I, Garcia V, Pizarro A, Luzoro A, Cavada G, Lopez J. A universal method to correct underreporting of communicable diseases. Real incidence of hydatidosis in Chile, 1985-1994. *Revista medica de Chile*. 1999;127(4):485-92.

Seruga B, Templeton AJ, Badillo FEV, Ocana A, Amir E, Tannock IF. Under-reporting of harm in clinical trials. *The Lancet Oncology*. 2016;17(5):e209-19.

Shafer SL, Dexter F. Publication bias, retrospective bias, and reproducibility of significant results in observational studies. *Anesthesia and analgesia*. 2012;114(5):931-2.

Shaheen NJ, Crosby MA, Bozyski EM, Sandler RS. Is there publication bias in the reporting of cancer risk in Barrett's esophagus? *Gastroenterology*. 2000;119(2):333-8.

Shaikh R, Guris D, Strebel PM, Wharton M. Underreporting of pertussis deaths in the United States: need for improved surveillance. *Pediatrics*. 1998;101(2):323.

Sham E, Smith T. Publication bias in studies of an applied behavior-analytic intervention: an initial analysis. *Journal of applied behavior analysis*. 2014;47(3):663-78.

Shamim S, Sharib SM, Malhi SM, Muntaha S-U, Raza H, Ata S, et al. Adverse drug reactions (ADRS) reporting: awareness and reasons of under-reporting among health care professionals, a challenge for pharmacists. *SpringerPlus*. 2016;5(1):1778.

Shankar MB, Rodriguez-Acosta RL, Sharp TM, Tomashek KM, Margolis HS, Meltzer MI. Estimating dengue under-reporting in Puerto Rico using a multiplier model. *PLoS neglected tropical diseases*. 2018;12(8):e0006650.

Shapiro BB, Bross R, Morrison G, Kalantar-Zadeh K, Kopple JD. Self-Reported Interview-Assisted Diet Records Underreport Energy Intake in Maintenance Hemodialysis Patients. *Journal of renal nutrition : the official journal of the Council on Renal Nutrition of the National Kidney Foundation*. 2015;25(4):357-63.

Sharifabadi AD, Korevaar DA, McGrath TA, van Es N, Frank RA, Cherpak L, et al. Reporting bias in imaging: higher accuracy is linked to faster publication. *European radiology*. 2018;28(9):3632-9.

Sharkey FE, Prihoda TJ. Underreporting of placental abnormalities. *Histopathology*. 2009;55(4):487-8.

Sharp DW. What can and should be done to reduce publication bias? The perspective of an editor. *Jama*. 1990;263(10):1390-1.

Shawyer AC, Pemberton J, Kanters D, Alnaqi AAA, Flageole H. Quality of reporting of the literature on gastrointestinal reflux after repair of esophageal atresia-tracheoesophageal fistula. *Journal of pediatric surgery*. 2015;50(7):1099-103.

Shea B, Bouter LM, Grimshaw JM, Francis D, Ortiz Z, Wells GA, et al. Scope for improvement in the quality of reporting of systematic reviews. From the Cochrane Musculoskeletal Group. *The Journal of rheumatology*. 2006;33(1):9-15.

Shear SL. Publication bias in pharmaceutical industry-sponsored research. *Journal of the American Academy of Dermatology*. 1993;28(6):1024.

Shepard MA, Parker D, DeClercque N. The under-reporting of pressure sores in patients transferred between hospital and nursing home. *Journal of the American Geriatrics Society*. 1987;35(2):159-60.

Shetty VM, Pai SB, Pai K, Jenson JJ. Anterolateral leg alopecia: unknown entity or yet underreported? *International journal of dermatology*. 2018.

Shiao JS-C, McLaws M-L, Lin M-H, Jagger J, Chen C-J. Chinese EPINet and recall rates for percutaneous injuries: an epidemic proportion of underreporting in the Taiwan healthcare system. *Journal of occupational health*. 2009;51(2):132-6.

Shields PG. Publication bias is a scientific problem with adverse ethical outcomes: the case for a section for null results. *Cancer epidemiology, biomarkers & prevention* : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology. 2000;9(8):771-2.

Shinar D, Valero-Mora P, van Strijp-Houtenbos M, Haworth N, Schramm A, De Bruyne G, et al. Under-reporting bicycle accidents to police in the COST TU1101 international survey: Cross-country comparisons and associated factors. *Accident; analysis and prevention*. 2018;110:177-86.

Shiraishi M, Haruna M, Matsuzaki M, Murayama R, Sasaki S. Pre-pregnancy BMI, gestational weight gain and body image are associated with dietary under-reporting in pregnant Japanese women. *Journal of nutritional science*. 2018;7:e12.

Shrier I. Comment on: "Publication bias, with a focus on psychiatry: causes and solutions". *CNS drugs*. 2013;27(9):773-4.

Shu Q, Tao H, Fu J, Zhang R, Zhou J, Cheng Z. The differences between doctors' and nurses' attitudes toward adverse event reporting and assessments of factors that inhibit reporting. *American Journal of Medical Quality*. 29:3. 262-3. 2014.

Shunmugam M, Azuara-Blanco A. The quality of reporting of diagnostic accuracy studies in glaucoma using the Heidelberg retina tomograph. *Investigative ophthalmology & visual science*. 2006;47(6):2317-23.

Sichert-Hellert W, Kersting M, Schoch G. Underreporting of energy intake in 1 to 18 year old German children and adolescents. *Zeitschrift fur Ernahrungswissenschaft*. 1998;37(3):242-51.

Siddharthan K, Hodgson M, Rosenberg D, Haiduven D, Nelson A. Under-reporting of work-related musculoskeletal disorders in the Veterans Administration. *International journal of health care quality assurance incorporating Leadership in health services*. 2006;19(6-7):463-76.

Siddiqi N. Publication bias in epidemiological studies. *Central European journal of public health*. 2011;19(2):118-20.

Siddiqui MAR, Azuara-Blanco A, Burr J. The quality of reporting of diagnostic accuracy studies published in ophthalmic journals. *The British journal of ophthalmology*. 2005;89(3):261-5.

Sikka RS, Narvy SJ, Vangsness CT, Jr. Anterior cruciate ligament allograft surgery: underreporting of graft source, graft processing, and donor age. *The American journal of sports medicine*. 2011;39(3):649-55.

Silva LK, Russomano FB. Underreporting of maternal mortality in Rio de Janeiro, Brazil: comparison of 2 information systems. *Boletim de la Oficina Sanitaria Panamericana Pan American Sanitary Bureau*. 1996;120(1):36-43.

Simes RJ. Confronting publication bias: a cohort design for meta-analysis. *Statistics in medicine*. 1987;6(1):11-29.

Simes RJ. Publication bias: the case for an international registry of clinical trials. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. 1986;4(10):1529-41.

Simonsohn U, Nelson LD, Simmons JP. p-Curve and Effect Size: Correcting for Publication Bias Using Only Significant Results. *Perspectives on psychological science : a journal of the Association for Psychological Science*. 2014;9(6):666-81.

Simonsohn U. It Does Not Follow: Evaluating the One-Off Publication Bias Critiques by Francis (2012a, 2012b, 2012c, 2012d, 2012e, in press). *Perspectives on psychological science : a journal of the Association for Psychological Science*. 2012;7(6):597-9.

Singh S, Khosla S. Suboptimal choice of methodology for meta-analysis and publication bias assessment. *The American journal of cardiology*. 2015;115(12):1782-3.

Singh SM, Geddes ERC, Boutrous SG, Galiano RD, Friedman PM. Paradoxical adipose hyperplasia secondary to cryolipolysis: An underreported entity? *Lasers in surgery and medicine*. 2015;47(6):476-8.

Singh SP, Reddy DCS, Rai M, Sundar S. Serious underreporting of visceral leishmaniasis through passive case reporting in Bihar, India. *Tropical medicine & international health : TM & IH*. 2006;11(6):899-905.

Singh VP, Ranjan A, Topno RK, Verma RB, Siddique NA, Ravidas VN, et al. Estimation of under-reporting of visceral leishmaniasis cases in Bihar, India. *The American journal of tropical medicine and hygiene*. 2010;82(1):9-11.

Sinha MK, Montori VM. Reporting bias and other biases affecting systematic reviews and meta-analyses: a methodological commentary. *Expert review of pharmacoeconomics & outcomes research*. 2006;6(5):603-11.

Sinha P, Sinha A, Baveja S, Sood A. A common but underreported entity of papulonecrotic tuberculid. *Medical journal, Armed Forces India*. 2015;71(Suppl 1):S237-9.

Sinha S, Sinha S, Ashby E, Jayaram R, Grocott MPW. Quality of reporting in randomized trials published in high-quality surgical journals. *Journal of the American College of Surgeons*. 2009;209(5):565-71.e1.

Sinno H, Izadpanah A, Izadpanah A, Gilardino MS. Publication bias in abstracts presented to the annual scientific meeting of the American Society of Plastic Surgeons. *Plastic and reconstructive surgery*. 2011;128(2):106e-8e.

Sivendran S, Latif A, McBride RB, Stensland KD, Wisnivesky J, Haines L, Oh WK, Galsky MD. Adverse event reporting in cancer clinical trial publications. *Journal of Clinical Oncology*. 32:2. 83-89. DOI: 10.1200/JCO.2013.52.2219. 2014.

Six C, Blanes de Canecaude J, Duponchel J, Lafont E, Decoppet A, Travanut M, et al. Spotlight on measles 2010: Measles outbreak in the Provence-Alpes-Cote dAzur region, France, January to November 2010 - substantial underreporting of cases: measles outbreak in the Provence-Alpes-Cote d Azur region, France, January to November 2010 - substantial underreporting of cases. *Euro surveillance : bulletin Europeen sur les maladies transmissibles = European communicable disease bulletin*. 2010;15(50).

Sjogren P, Halling A. Quality of reporting randomised clinical trials in dental and medical research. *British dental journal*. 2002;192(2):100-3.

Sjouke B, Defesche JC, Hartgers ML, Wiegman A, Roeters van Lennep JE, Kastelein JJ, et al. Double-heterozygous autosomal dominant hypercholesterolemia: Clinical characterization of an underreported disease. *Journal of clinical lipidology*. 2016;10(6):1462-9.

Sleep CE, Sellbom M, Campbell WK, Miller JD. Narcissism and response validity: Do individuals with narcissistic features underreport psychopathology? *Psychological assessment*. 2017;29(8):1059-64.

Slutske WS, Heath AC, Madden PA, Bucholz KK, Dinwiddie SH, Dunne MP, et al. Reliability and reporting biases for perceived parental history of alcohol-related

problems: agreement between twins and differences between discordant pairs. *Journal of studies on alcohol*. 1996;57(4):387-95.

Smidt N, Rutjes AWS, van der Windt DAWM, Ostelo RWJG, Bossuyt PM, Reitsma JB, et al. Reproducibility of the STARD checklist: an instrument to assess the quality of reporting of diagnostic accuracy studies. *BMC medical research methodology*. 2006;6:12.

Smidt N, Rutjes AWS, van der Windt DAWM, Ostelo RWJG, Reitsma JB, Bossuyt PM, et al. Quality of reporting of diagnostic accuracy studies. *Radiology*. 2005;235(2):347-53.

Smith BA, Lee H-J, Lee JH, Choi M, Jones DE, Bausell RB, et al. Quality of reporting randomized controlled trials (RCTs) in the nursing literature: application of the consolidated standards of reporting trials (CONSORT). *Nursing outlook*. 2008;56(1):31-7.

Smith DR. Needlestick injury surveillance and underreporting in Japan. *American journal of infection control*. 2010;38(2):163-5.

Smith JA, Arshad Z, Thomas H, Carr AJ, Brindley DA. Evidence of insufficient quality of reporting in patent landscapes in the life sciences. *Nature biotechnology*. 2017;35(3):210-4.

Smith L, Westrick R, Sauers S, Cooper A, Scofield D, Claro P, et al. Underreporting of Musculoskeletal Injuries in the US Army: Findings From an Infantry Brigade Combat Team Survey Study. *Sports health*. 2016;8(6):507-13.

Smith LB, Adler NE, Tschann JM. Underreporting sensitive behaviors: the case of young women's willingness to report abortion. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*. 1999;18(1):37-43.

Smith WT, Webb KL, Heywood PF. The implications of underreporting in dietary studies. *Australian journal of public health*. 1994;18(3):311-4.

Smorgick N, Herman A, Schneider D, Halperin R, Pansky M. Paraovarian cysts of neoplastic origin are underreported. *JSLs : Journal of the Society of Laparoendoscopic Surgeons*. 2009;13(1):22-6.

Smulders YM. A two-step manuscript submission process can reduce publication bias. *Journal of clinical epidemiology*. 2013;66(9):946-7.

Smyth RMD, Kirkham JJ, Jacoby A, Altman DG, Gamble C, Williamson PR. Frequency and reasons for outcome reporting bias in clinical trials: interviews with trialists. *BMJ (Clinical research ed)*. 2011;342:c7153.

Snodgrass SD, Poissant TM, Thomas AR. Notes from the Field: Underreporting of Maternal Hepatitis C Virus Infection Status and the Need for Infant Testing - Oregon, 2015. *MMWR Morbidity and mortality weekly report*. 2018;67(6):201-2.

Snyder LA, Chen PY, Vacha-Haase T. The underreporting gap in aggressive incidents from geriatric patients against certified nursing assistants. *Violence and victims*. 2007;22(3):367-79.

Soares DA, Goncalves MJ. Cardiovascular mortality and impact of corrective techniques for dealing with underreported and ill-defined deaths. *Revista panamericana de salud publica = Pan American journal of public health*. 2012;32(3):199-206.

Soares VMN, de Azevedo EMM, Watanabe TL. Underreporting of maternal deaths in Parana State, Brazil: 1991-2005. *Cadernos de saude publica*. 2008;24(10):2418-26.

Soeken KL, Sripusanapan A. Assessing publication bias in meta-analysis. *Nursing research*. 2003;52(1):57-60.

Solano R, Crespo I, Fernandez MI, Valero C, Alvarez MI, Godoy P, et al. Underdetection and underreporting of pertussis in children attended in primary health care centers: Do surveillance systems require improvement? *American journal of infection control*. 2016;44(11):e251-e6.

Solomon P, Hutton J. Meta-analysis, overviews and publication bias. *Statistical methods in medical research*. 2001;10(4):245-50.

Soltmann B, Pfennig A, Weikert B, Bauer M, Strech D. Quality of reporting in studies on bipolar disorders: implications for the development of guidelines. *Der Nervenarzt*. 2012;83(5):604-17.

Somford MP, van Deurzen DFP, Ostendorf M, Eygendaal D, van den Bekerom MPJ. Quality of research and quality of reporting in elbow surgery trials. *Journal of shoulder and elbow surgery*. 2015;24(10):1619-26.

Son C, Tavakoli S, Bartanusz V. No publication bias in industry funded clinical trials of degenerative diseases of the spine. *Journal of clinical neuroscience : official journal of the Neurosurgical Society of Australasia*. 2016;25:58-61.

Song F, Eastwood A, Gilbody S, Duley L. The role of electronic journals in reducing publication bias. *Medical informatics and the Internet in medicine*. 1999;24(3):223-9.

Song F, Gilbody S. Bias in meta-analysis detected by a simple, graphical test. Increase in studies of publication bias coincided with increasing use of meta-analysis. *BMJ (Clinical research ed)*. 1998;316(7129):471.

Song F, Khan KS, Dinnes J, Sutton AJ. Asymmetric funnel plots and publication bias in meta-analyses of diagnostic accuracy. *International journal of epidemiology*. 2002;31(1):88-95.

Song F, Parekh-Bhurke S, Hooper L, Loke YK, Ryder JJ, Sutton AJ, et al. Extent of publication bias in different categories of research cohorts: a meta-analysis of empirical studies. *BMC medical research methodology*. 2009;9:79.

Song F. Review of publication bias in studies on publication bias: studies on publication bias are probably susceptible to the bias they study. *BMJ (Clinical research ed)*. 2005;331(7517):637-8.

Sood A, Knudsen K, Sood R, Wahner-Roedler DL, Barnes SA, Bardia A, et al. Publication bias for CAM trials in the highest impact factor medicine journals is partly due to geographical bias. *Journal of clinical epidemiology*. 2007;60(11):1123-6.

Sosin M, Lumeh W, Cooper M. Torsion of the retroperitoneal kidney: uncommon or underreported? *Case reports in transplantation*. 2014;2014:561506.

Souza DRd, Anjos LA, Wahrlich V, Vasconcellos MTLd. Energy intake underreporting of adults in a household survey: the impact of using a population

specific basal metabolic rate equation. *Cadernos de saude publica*. 2015;31(4):777-86.

Souza JP, Pileggi C, Cecatti JG. Assessment of funnel plot asymmetry and publication bias in reproductive health meta-analyses: an analytic survey. *Reproductive health*. 2007;4:3.

Sox HC. Improving the quality of reporting studies of quality improvement: the SQUIRE guidelines. *Annals of internal medicine*. 2008;149(9):683.

Spaeth DG. Observatory clues to aid in the diagnosing of diastasis symphysis pubis: an underreported complication of parturition. *The Journal of the American Osteopathic Association*. 1997;97(3):152-5.

Spanos NP, Burgess CA, Cross PA, MacLeod G. Hypnosis, reporting bias, and suggested negative hallucinations. *Journal of abnormal psychology*. 1992;101(1):192-9.

Spapen J, Hermans H, Rosseel M, Buysschaert I. *Campylobacter jejuni*-related cardiomyopathy: Unknown entity or yet underreported? *International journal of cardiology*. 2015;198:24-5.

Spence JC. The paradox of statistical power and publication bias. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*. 2001;20(5):393.

Spiegel R, Opic P, Semmlack S, Tschudin-Sutter S, Sutter R. Tackling submission and publication bias. *BMJ (Clinical research ed)*. 2017;358:j3436.

Spindler H, Salyuk T, Vitek C, Rutherford G. Underreporting of HIV transmission among men who have sex with men in the Ukraine. *AIDS research and human retroviruses*. 2014;30(5):407-8.

Squitieri L, Petruska E, Chung KC. Publication bias in Kienbock's disease: systematic review. *The Journal of hand surgery*. 2010;35(3):359-67.e5.

Sridharan K, Sivaramakrishnan G. Tranexamic acid in total hip arthroplasty: A recursive cumulative meta-analysis of randomized controlled trials and assessment of publication bias. *Journal of orthopaedics*. 2017;14(3):323-8.

Sridharan L, Greenland P. Editorial policies and publication bias: the importance of negative studies. *Archives of internal medicine*. 2009;169(11):1022-3.

Stacey MJ, Brett S, Woods D, Jackson S, Ross D. Case ascertainment of heat illness in the British Army: evidence of under-reporting from analysis of Medical and Command notifications, 2009-2013. *Journal of the Royal Army Medical Corps*. 2016;162(6):428-33.

Stainton SM, Thabit AK, Kuti JL, Aslanzadeh J, Nicolau DP. Prevalence, patient characteristics and outcomes of a novel piperacillin/tazobactam-resistant, pan-beta-lactam-susceptible phenotype in Enterobacteriaceae: implications for selective reporting. *Clinical microbiology and infection : the official publication of the European Society of Clinical Microbiology and Infectious Diseases*. 2017;23(8):581-2.

Stallone DD, Brunner EJ, Bingham SA, Marmot MG. Dietary assessment in Whitehall II: the influence of reporting bias on apparent socioeconomic variation in nutrient intakes. *European journal of clinical nutrition*. 1997;51(12):815-25.

Stambough JL. In the eye of the beholder: Commentary on an article by Joshua D. Auerbach, MD, et al.: "Mitigating adverse event reporting bias in spine surgery". *The Journal of bone and joint surgery American volume*. 2013;95(16):e120(1-2).

Stanley TD, Doucouliagos H, Ioannidis JPA. Finding the power to reduce publication bias. *Statistics in medicine*. 2017;36(10):1580-98.

Stanley TD, Doucouliagos H. Meta-regression approximations to reduce publication selection bias. *Research synthesis methods*. 2014;5(1):60-78.

Stanten R, Frey CF. Pancreatitis after endoscopic retrograde cholangiopancreatography. An underreported disease whose severity is often unappreciated. *Archives of surgery (Chicago, Ill : 1960)*. 1990;125(8):1032-4; discussion 5.

Steffee CH, Morrell RM, Wasilauskas BL. Clinical use of rifampicin during routine reporting of rifampicin susceptibilities: a lesson in selective reporting of antimicrobial susceptibility data. *The Journal of antimicrobial chemotherapy*. 1997;40(4):595-8.

Steingard S. Publication bias: calling academic physicians to account. *The American journal of psychiatry*. 2009;166(8):934; author reply

Stern JM, Simes RJ. Publication bias: evidence of delayed publication in a cohort study of clinical research projects. *BMJ (Clinical research ed)*. 1997;315(7109):640-5.

Stice E, Palmrose CA, Burger KS. Elevated BMI and Male Sex Are Associated with Greater Underreporting of Caloric Intake as Assessed by Doubly Labeled Water. *The Journal of nutrition*. 2015;145(10):2412-8.

Stock S, Nicolakakis N, Raiq H, Messing K, Lippel K, Turcot A. Underreporting work absences for nontraumatic work-related musculoskeletal disorders to workers' compensation: results of a 2007-2008 survey of the Quebec working population. *American journal of public health*. 2014;104(3):e94-e101.

Stockwell T, Donath S, Cooper-Stanbury M, Chikritzhs T, Catalano P, Mateo C. Under-reporting of alcohol consumption in household surveys: a comparison of quantity-frequency, graduated-frequency and recent recall. *Addiction (Abingdon, England)*. 2004;99(8):1024-33.

Stojadinovic A, Shockey SM, Croll SM, Buckenmaier CC, 3rd. Quality of reporting of regional anesthesia outcomes in the literature. *Pain medicine (Malden, Mass)*. 2009;10(6):1123-31.

Storm HH, Lynge E, Osterlind A, Jensen OM. Multiple primary cancers in Denmark 1943-80; influence of possible underreporting and suggested risk factors. *The Yale journal of biology and medicine*. 1986;59(5):547-59.

Strang E, Peterson ZD. Use of a Bogus Pipeline to Detect Men's Underreporting of Sexually Aggressive Behavior. *Journal of interpersonal violence*. 2016;886260516681157.

Strauss R, Fulop G, Pfeifer C. Hepatitis C in Austria 1993-2000: reporting bias distort HCV epidemiology in Austria. *Euro surveillance : bulletin Europeen sur les maladies transmissibles = European communicable disease bulletin*. 2003;8(5):113-8.

Strech D, Soltmann B, Weikert B, Bauer M, Pfennig A. Quality of reporting of randomized controlled trials of pharmacologic treatment of bipolar disorders: a systematic review. *The Journal of clinical psychiatry*. 2011;72(9):1214-21.

Stuart J. Under-reporting of AIDS. *South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde*. 1993;83(9):689-90.

Stubbs B. The prevalence and odds of suicidal thoughts, behaviours and deaths among people with painful comorbidities: An updated meta-analysis accounting for publication bias. *Journal of psychiatric research*. 2016;72:72-3.

Stubbs J. Nutrition. Under-reporting in epidemiological and intervention studies: is identifying the under reporters enough? *Current opinion in lipidology*. 1997;8(5):U61-2.

Stuck AK, Fuhrer E, Limacher A, Mean M, Aujesky D. Adjudication-related processes are underreported and lack standardization in clinical trials of venous thromboembolism: a systematic review. *Journal of clinical epidemiology*. 2014;67(3):278-84.

Stuijver DJF, Romualdi E, van Zaane B, Bax L, Buller HR, Gerdes VEA, et al. Under-reporting of venous and arterial thrombotic events in randomized clinical trials: a meta-analysis. *Internal and emergency medicine*. 2015;10(2):219-46.

Su C-X, Han M, Ren J, Li W-Y, Yue S-J, Hao Y-F, et al. Empirical evidence for outcome reporting bias in randomized clinical trials of acupuncture: comparison of registered records and subsequent publications. *Trials*. 2015;16:28.

Sugita M, Kanamori M, Izuno T, Miyakawa M. Estimating a summarized odds ratio whilst eliminating publication bias in meta-analysis. *Japanese journal of clinical oncology*. 1992;22(5):354-8.

Sugita M, Yamaguchi N, Izuno T, Kanamori M, Kasuga H. Publication probability of a study on odds ratio value circumstantial evidence for publication bias in medical study areas. *The Tokai journal of experimental and clinical medicine*. 1994;19(1-2):29-37.

Suissa K, Benedetti A, Henderson M, Gray-Donald K, Paradis G. The Cardiometabolic Risk Profile of Underreporters of Energy Intake Differs from

That of Adequate Reporters among Children at Risk of Obesity. *The Journal of nutrition*. 2019;149(1):123-30.

Suliman I, Guirguis J, Chyshkevych I, Dabage NF. Splenic Injury with Subsequent Pleural Effusion: An Underreported Complication of Colonoscopy. *Case reports in gastroenterology*. 2019;13(1):6-11.

Sun J, Guo X, Lu Z, Fu Z, Li X, Chu J, et al. The gap between cause-of-death statistics and Household Registration reports in Shandong, China during 2011-2013: Evaluation and adjustment for underreporting in the mortality data for 262 subcounty level populations. *PloS one*. 2018;13(6):e0199133.

Sun P, Zhao W. Be careful about heterogeneity and publication bias in meta-analysis. *Journal of clinical anesthesia*. 2019;53:76.

Sunny L. Is it reporting bias doubled the risk of prostate cancer in vasectomised men in Mumbai, India? *Asian Pacific journal of cancer prevention : APJCP*. 2005;6(3):320-5.

Suraweera IK, Wijesinghe SD, Senanayake SJ, Herath HDB, Jayalal TBA. Occupational health issues in small-scale industries in Sri Lanka: An underreported burden. *Work (Reading, Mass)*. 2016;55(2):263-9.

Sutton AJ, Duval SJ, Tweedie RL, Abrams KR, Jones DR. Empirical assessment of effect of publication bias on meta-analyses. *BMJ (Clinical research ed)*. 2000;320(7249):1574-7.

Sutton AJ, Song F, Gilbody SM, Abrams KR. Modelling publication bias in meta-analysis: a review. *Statistical methods in medical research*. 2000;9(5):421-45.

Sverzellati N, Arcadi T, Salvolini L, Dore R, Zompatori M, Mereu M, et al. Under-reporting of cardiovascular findings on chest CT. *La Radiologia medica*. 2016;121(3):190-9.

Swaen GMH, Urlings MJE, Zeegers MP. Outcome reporting bias in observational epidemiology studies on phthalates. *Annals of epidemiology*. 2016;26(8):597-9.e4.

Swartz MK. Commercial sexual exploitation of minors: overlooked and underreported. *Journal of pediatric health care : official publication of National Association of Pediatric Nurse Associates & Practitioners*. 2014;28(3):195-6.

Swartzman LC, Edelberg R, Kemmann E. Impact of stress on objectively recorded menopausal hot flushes and on flush report bias. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*. 1990;9(5):529-45.

Syed MA, Bana NF. Pertussis. A reemerging and an underreported infectious disease. *Saudi medical journal*. 2014;35(10):1181-7.

Syin D, Woreta T, Chang DC, Cameron JL, Pronovost PJ, Makary MA. Publication bias in surgery: implications for informed consent. *The Journal of surgical research*. 2007;143(1):88-93.

Tabatabaei-Malazy O, Shadman Z, Ejtahed H-S, Atlasi R, Abdollahi M, Larijani B. Quality of reporting of randomized controlled trials of herbal medicines conducted in metabolic disorders in Middle East countries: A systematic review. *Complementary therapies in medicine*. 2018;38:61-6.

Takagi H, Sekino S, Kato T, Matsuno Y, Umemoto T. Revisiting evidence on lung cancer and passive smoking: adjustment for publication bias by means of "trim and fill" algorithm. *Lung cancer (Amsterdam, Netherlands)*. 2006;51(2):245-6.

Takagi H, Umemoto T. The specter of publication bias: adjustment for publication bias in the evidence on cardiac death associated with passive smoking in nonsmoking women. *International journal of cardiology*. 2011;149(3):388-9.

Takeda A, Loveman E, Harris P, Hartwell D, Welch K. Time to full publication of studies of anti-cancer medicines for breast cancer and the potential for publication bias: a short systematic review. *Health technology assessment (Winchester, England)*. 2008;12(32):iii, ix-x, 1-46.

Talmon J, Ammenwerth E, Geven T. The quality of reporting of health informatics evaluation studies: a pilot study. *Studies in health technology and informatics*. 2007;129(Pt 1):193-7.

Tandberg D, Stewart KK, Doezema D. Under-reporting of contaminated needlestick injuries in emergency health care workers. *Annals of emergency medicine*. 1991;20(1):66-70.

Tandir S, Sivic S, Tandir L, Zunic L. Quality of reporting on infectious diseases in Zenica-Doboj Canton. *Medicinski arhiv*. 2011;65(1):42-5.

Tandon VR, Mahajan V, Khajuria V, Gillani Z. Under-reporting of adverse drug reactions: a challenge for pharmacovigilance in India. *Indian journal of pharmacology*. 2015;47(1):65-71.

Tapsfield J, Mathews T, Lungu M, van Oosterhout JJ. Underreporting of side effects of standard first-line ART in the routine setting in Blantyre, Malawi. *Malawi medical journal : the journal of Medical Association of Malawi*. 2011;23(4):115-7.

Taylor CM, Vehorn A, Noble H, Weitlauf AS, Warren ZE. Brief report: can metrics of reporting bias enhance early autism screening measures? *Journal of autism and developmental disorders*. 2014;44(9):2375-80.

Tchantchaleishvili V, Umakanthan R, Karp S, Stulak JM, Keebler ME, Maltais S. General surgical complications associated with the use of long-term mechanical circulatory support devices: are we 'under-reporting' problems? *Expert review of medical devices*. 2013;10(3):379-87.

Teanby D. Underreporting of pedestrian road accidents. *BMJ (Clinical research ed)*. 1992;304(6824):422.

Tejedor N, Sanchez del Viso Y, Zafra E, Turabian JL. Underreporting of adverse reactions to drugs: is it due to primary care or hospital care? *Atencion primaria*. 1994;14(10):1154-5.

Tenhunen JJ. Bull's eye missed by the magic bullet: preclinical investigations, publication bias, and promising new interventions. *Critical care medicine*. 2008;36(4):1361-3.

ter Riet G, Korevaar DA, Leenaars M, Sterk PJ, Van Noorden CJF, Bouter LM, et al. Publication bias in laboratory animal research: a survey on magnitude, drivers, consequences and potential solutions. *PloS one*. 2012;7(9):e43404.

Terrin N, Schmid CH, Lau J, Olkin I. Adjusting for publication bias in the presence of heterogeneity. *Statistics in medicine*. 2003;22(13):2113-26.

Terrin N, Schmid CH, Lau J. In an empirical evaluation of the funnel plot, researchers could not visually identify publication bias. *Journal of clinical epidemiology*. 2005;58(9):894-901.

Thabane L, Chu R, Cuddy K, Douketis J. What is the quality of reporting in weight loss intervention studies? A systematic review of randomized controlled trials. *International journal of obesity (2005)*. 2007;31(10):1554-9.

Thaler K, Kien C, Nussbaumer B, Van Noord MG, Griebler U, Klerings I, et al. Inadequate use and regulation of interventions against publication bias decreases their effectiveness: a systematic review. *Journal of clinical epidemiology*. 2015;68(7):792-802.

Thelle DS. STROBE and STREGA: instruments for improving transparency and quality of reporting scientific results. *European journal of epidemiology*. 2009;24(1):7-8.

Thiebaut ACM, Kipnis V. Dietary fat underreporting and risk estimation. *Public health nutrition*. 2007;10(2):212-3; author reply 3-4.

Thompson A. The consequences of underreporting workers' compensation claims. *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*. 2007;176(3):343-4.

Thornton A, Lee P. Publication bias in meta-analysis: its causes and consequences. *Journal of clinical epidemiology*. 2000;53(2):207-16.

Tiago ZdS, Picoli RP, Graeff SV-B, Cunha RVd, Arantes R. Underreporting of gestational, congenital and acquired syphilis among indigenous peoples in Mato Grosso do Sul State, Brazil, 2011-2014. *Epidemiologia e servicos de saude : revista do Sistema Unico de Saude do Brasil*. 2017;26(3):503-12.

Tichelaar YIGV, Lijfering WM. Is hyperhomocysteinaemia a minor risk factor for venous thrombosis or subject to publication bias? *The Netherlands journal of medicine*. 2015;73(8):394-5.

Timmer A, Hilsden RJ, Cole J, Hailey D, Sutherland LR. Publication bias in gastroenterological research - a retrospective cohort study based on abstracts submitted to a scientific meeting. *BMC medical research methodology*. 2002;2:7.

Timmer A. Publication bias in trials other than RCTs. *Zeitschrift fur Evidenz, Fortbildung und Qualitat im Gesundheitswesen*. 2011;105(3):194-200.

Ting J. Updated 2010 Consolidated Standards of Reporting Trials guidelines and selective reporting of clinical trial outcomes: In response to Babl and Davidson. *Emergency medicine Australasia : EMA*. 2011;23(1):108.

Ting KHJ, Hill CL, Whittle SL. Quality of reporting of interventional animal studies in rheumatology: a systematic review using the ARRIVE guidelines. *International journal of rheumatic diseases*. 2015;18(5):488-94.

Tiruvoipati R, Balasubramanian SP, Atturu G, Peek GJ, Elbourne D. Improving the quality of reporting randomized controlled trials in cardiothoracic surgery: the way forward. *The Journal of thoracic and cardiovascular surgery*. 2006;132(2):233-40.

Toan NT, Rossi S, Prisco G, Nante N, Viviani S. Dengue epidemiology in selected endemic countries: factors influencing expansion factors as estimates of underreporting. *Tropical medicine & international health : TM & IH*. 2015;20(7):840-63.

Tollefson D, Ngari F, Mwakala M, Gethi D, Kipruto H, Cain K, et al. Under-reporting of sputum smear-positive tuberculosis cases in Kenya. *The international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease*. 2016;20(10):1334-41.

Tomar S. Dental health history forms may underreport adolescent smoking. *The journal of evidence-based dental practice*. 2006;6(3):224-6.

Tomasi C, Derks J. Clinical research of peri-implant diseases--quality of reporting, case definitions and methods to study incidence, prevalence and risk factors of peri-implant diseases. *Journal of clinical periodontology*. 2012;39 Suppl 12:207-23.

Tonia T, Schwarzer G, Bohlius J. Cancer, meta-analysis and reporting biases: the case of erythropoiesis-stimulating agents. *Swiss medical weekly*. 2013;143:w13776.

Tonstad S, Gorbitz C, Sivertsen M, Ose L. Under-reporting of dietary intake by smoking and non-smoking subjects counselled for hypercholesterolaemia. *Journal of internal medicine*. 1999;245(4):337-44.

Tooth L, Ware R, Bain C, Purdie DM, Dobson A. Quality of reporting of observational longitudinal research. *American journal of epidemiology*. 2005;161(3):280-8.

Tooze JA, Subar AF, Thompson FE, Troiano R, Schatzkin A, Kipnis V. Psychosocial predictors of energy underreporting in a large doubly labeled water study. *The American journal of clinical nutrition*. 2004;79(5):795-804.

Torello Iserte J, Castillo Ferrando JR, Lainez MM, Garcia Morillas M, Arias Gonzalez A. Adverse reactions to drugs reported by the primary care physicians of Andalusia. Analysis of underreporting. *Atencion primaria*. 1994;13(6):307-11.

Torisson G, van Westen D, Stavenow L, Minthon L, Londos E. Medial temporal lobe atrophy is underreported and may have important clinical correlates in medical inpatients. *BMC geriatrics*. 2015;15:65.

Torner A, Stokkeland K, Svensson A, Dickman PW, Hultcrantz R, Montgomery S, et al. The underreporting of hepatocellular carcinoma to the cancer register and a log-linear model to estimate a more correct incidence. *Hepatology (Baltimore, Md)*. 2017;65(3):885-92.

Tourtier J-P, Mangouka L, Bordier E, Carmoi T. Under-reporting of errors: an information technology perspective. *Journal of telemedicine and telecare*. 2011;17(1):54.

Trenque T, Maura G, Herlem E, Vallet C, Sole E, Auriche P, et al. Reports of sexual disorders related to serotonin reuptake inhibitors in the French pharmacovigilance database: an example of underreporting. *Drug safety*. 2013;36(7):515-9.

Trevena JA, Rogers KD, Jorm LR, Churches T, Armstrong B. Quantifying under-reporting of pathology tests in Medical Benefits Schedule claims data. Australian health review : a publication of the Australian Hospital Association. 2013;37(5):649-53.

Trinquart L, Abbe A, Ravaud P. Impact of reporting bias in network meta-analysis of antidepressant placebo-controlled trials. PloS one. 2012;7(4):e35219.

Trinquart L, Chatellier G, Ravaud P. Adjustment for reporting bias in network meta-analysis of antidepressant trials. BMC medical research methodology. 2012;12:150.

Trinquart L, Ioannidis JPA, Chatellier G, Ravaud P. A test for reporting bias in trial networks: simulation and case studies. BMC medical research methodology. 2014;14:112.

Trung LQ, Morra ME, Truong ND, Turk T, Elshafie A, Foly A, et al. A systematic review finds underreporting of ethics approval, informed consent, and incentives in clinical trials. Journal of clinical epidemiology. 2017;91:80-6.

Tseng TY, Stoffs TL, Dahm P. Evidence-based urology in practice: publication bias. BJU international. 2010;106(3):318-20.

Tsui ELH, Leung GM, Woo PPS, Choi S, Lo S-V. Under-reporting of inpatient services utilisation in household surveys -- a population-based study in Hong Kong. BMC health services research. 2005;5(1):31.

Tu J-R. Reasons for publication bias in acupuncture RCTs. Zhongguo zhen jiu = Chinese acupuncture & moxibustion. 2010;30(7):601-8.

Tucker S, Diekrager D, Turner N, Kelloway EK. Work-related injury underreporting among young workers: prevalence, gender differences, and explanations for underreporting. Journal of safety research. 2014;50:67-73.

Tuma RS. New law may be having some effect on publication bias. Journal of the National Cancer Institute. 2010;102(5):290-2.

Tummler G, RiSsmann A, Meister R, Schaefer C. Congenital bladder exstrophy associated with Duogynon hormonal pregnancy tests-signal for teratogenicity or consumer report bias? *Reproductive toxicology* (Elmsford, NY). 2014;45:14-9.

Turk T, Elhady MT, Rashed S, Abdelkhalek M, Nasef SA, Khallaf AM, et al. Quality of reporting web-based and non-web-based survey studies: What authors, reviewers and consumers should consider. *PloS one*. 2018;13(6):e0194239.

Turner EH, Knoepflmacher D, Shapley L. Publication bias in antipsychotic trials: an analysis of efficacy comparing the published literature to the US Food and Drug Administration database. *PLoS medicine*. 2012;9(3):e1001189.

Turner EH. Author's reply to Shrier: "Publication bias, with a focus on psychiatry: causes and solutions". *CNS drugs*. 2013;27(9):775-6.

Turner EH. Publication bias, with a focus on psychiatry: causes and solutions. *CNS drugs*. 2013;27(6):457-68.

Turner LA, Cyr M, Kinch RAH, Liston R, Kramer MS, Fair M, et al. Under-reporting of maternal mortality in Canada: a question of definition. *Chronic diseases in Canada*. 2002;23(1):22-30.

Tursz A, Crost M, Gerbouin-Rerolle P, Cook JM. Underascertainment of child abuse fatalities in France: retrospective analysis of judicial data to assess underreporting of infant homicides in mortality statistics. *Child abuse & neglect*. 2010;34(7):534-44.

Udry JR, Gaughan M, Schwingl PJ, van den Berg BJ. A medical record linkage analysis of abortion underreporting. *Family planning perspectives*. 1996;28(5):228-31.

Uesawa Y, Takeuchi T, Mohri K. Publication bias on clinical studies of pharmacokinetic interactions between felodipine and grapefruit juice. *Die Pharmazie*. 2010;65(5):375-8.

Ulrich R, Miller J. Some properties of p-curves, with an application to gradual publication bias. *Psychological methods*. 2018;23(3):546-60.

Undurraga EA, Edillo FE, Erasmo JNV, Alera MTP, Yoon I-K, Largo FM, et al. Disease Burden of Dengue in the Philippines: Adjusting for Underreporting by Comparing Active and Passive Dengue Surveillance in Punta Princesa, Cebu City. *The American journal of tropical medicine and hygiene*. 2017;96(4):887-98.

Vaganay A. Outcome Reporting Bias in Government-Sponsored Policy Evaluations: A Qualitative Content Analysis of 13 Studies. *PloS one*. 2016;11(9):e0163702.

Vainapel S, Shamir OY, Tenenbaum Y, Gilam G. The dark side of gendered language: The masculine-generic form as a cause for self-report bias. *Psychological assessment*. 2015;27(4):1513-9.

Vaitkus PT, Brar C. N-acetylcysteine in the prevention of contrast-induced nephropathy: publication bias perpetuated by meta-analyses. *American heart journal*. 2007;153(2):275-80.

van Aert RCM, Wicherts JM, van Assen MALM. Publication bias examined in meta-analyses from psychology and medicine: A meta-meta-analysis. *PloS one*. 2019;14(4):e0215052.

van de Laar TJ, Bezemer D, van Laethem K, Vandewalle G, de Smet A, van Wijngaerden E, et al. Phylogenetic evidence for underreporting of male-to-male sex among human immunodeficiency virus-infected donors in the Netherlands and Flanders. *Transfusion*. 2017;57(5):1235-47.

van de Wetering FT, Scholten RJPM, Haring T, Clarke M, Hooft L. Trial registration numbers are underreported in biomedical publications. *PloS one*. 2012;7(11):e49599.

van den Bogert CA, Souverein PC, Brekelmans CTM, Janssen SWJ, van Hunnik M, Koeter GH, et al. Occurrence and determinants of selective reporting of clinical drug trials: design of an inception cohort study. *BMJ open*. 2015;5(7):e007827.

van den Brink G, Wishaupt JO, Douma JC, Hartwig NG, Versteegh FGA. *Bordetella pertussis*: an underreported pathogen in pediatric respiratory infections, a prospective cohort study. *BMC infectious diseases*. 2014;14:526.

van der Heijden PGM, van Puijenbroek EP, van Buuren S, van der Hofstede JW. On the assessment of adverse drug reactions from spontaneous reporting systems: the influence of under-reporting on odds ratios. *Statistics in medicine*. 2002;21(14):2027-44.

Van der Heyden J, Charafeddine R, De Bacquer D, Tafforeau J, Van Herck K. Regional differences in the validity of self-reported use of health care in Belgium: selection versus reporting bias. *BMC medical research methodology*. 2016;16(1):98.

van der Jagt M, Koudstaal PJ, Dippel DWJ, Habbema JDF. Methodological quality and publication bias in observational studies on risk of rupture of unruptured intracranial aneurysms. *Stroke*. 2008;39(1):e11.

van der Meersch A, Dechartres A, Ravaud P. Quality of reporting of bioequivalence trials comparing generic to brand name drugs: a methodological systematic review. *PloS one*. 2011;6(8):e23611.

van der Steen JT, van den Bogert CA, van Soest-Poortvliet MC, Fazeli Farsani S, Otten RHJ, Ter Riet G, et al. Determinants of selective reporting: A taxonomy based on content analysis of a random selection of the literature. *PloS one*. 2018;13(2):e0188247.

van der Veen FJC, van Hagen JM, Berkhof J, Don Griot JPW. Regional underreporting of associated congenital anomalies in cleft patients in the Netherlands. *The Cleft palate-craniofacial journal : official publication of the American Cleft Palate-Craniofacial Association*. 2006;43(6):710-4.

Van Dongen S. Associations between asymmetry and human attractiveness: Possible direct effects of asymmetry and signatures of publication bias. *Annals of human biology*. 2011;38(3):317-23.

Van Dorn RA, Desmarais SL, Swartz MS, Young MS, Sellers BG. Letter to the editor: Critique of Bahorik et al. (2013)--'Under-reporting of drug use among individuals with schizophrenia: prevalence and predictors'. *Psychological medicine*. 2014;44(3):668-70.

van Enst WA, Ochodo E, Scholten RJPM, Hooft L, Leeflang MM. Investigation of publication bias in meta-analyses of diagnostic test accuracy: a meta-epidemiological study. *BMC medical research methodology*. 2014;14:70.

van Gelder MMHJ, Donders ART, Devine O, Roeleveld N, Reefhuis J, National Birth Defects Prevention S. Using bayesian models to assess the effects of under-reporting of cannabis use on the association with birth defects, national birth defects prevention study, 1997-2005. *Paediatric and perinatal epidemiology*. 2014;28(5):424-33.

van Hest NA, Smit F, Verhave JP. Considerable underreporting of malaria in the Netherlands; a capture-recapture analysis. *Nederlands tijdschrift voor geneeskunde*. 2001;145(4):175-9.

van Hest NAH, Smit F, Verhave JP. Underreporting of malaria incidence in The Netherlands: results from a capture-recapture study. *Epidemiology and infection*. 2002;129(2):371-7.

van Lent M, Out HJ. Effect of funding source on publication bias is not so clear cut. *BMJ (Clinical research ed)*. 2013;347:f7582.

van Lent M, Overbeke J, Out HJ. Recommendations for a uniform assessment of publication bias related to funding source. *BMC medical research methodology*. 2013;13:120.

van Lent M, Overbeke J, Out HJ. Role of editorial and peer review processes in publication bias: analysis of drug trials submitted to eight medical journals. *PloS one*. 2014;9(8):e104846.

van Leth F, Evenblij K, Wit F, Kiers A, Sprenger H, Verhagen M, et al. TB-HIV co-infection in the Netherlands: estimating prevalence and under-reporting in national registration databases using a capture-recapture analysis. *Journal of epidemiology and community health*. 2016;70(6):556-60.

van Loenhout-Rooyackers JH, Leufkens HG, Hekster YA, Kalisvaart NA. Pyrazinamide use as a method of estimating under-reporting of tuberculosis. *The international journal of tuberculosis and lung disease : the official journal of the International Union against Tuberculosis and Lung Disease*. 2001;5(12):1156-60.

van Oldenrijk J, van Berkel Y, Kerkhoffs GMMJ, Bhandari M, Poolman RW. Do authors report surgical expertise in open spine surgery related randomized controlled trials? A systematic review on quality of reporting. *Spine*. 2013;38(10):857-64.

van Veldhuisen DJ, Poole-Wilson PA. The underreporting of results and possible mechanisms of 'negative' drug trials in patients with chronic heart failure. *International journal of cardiology*. 2001;80(1):19-27.

van Vliet EPM, Eijkemans MJC, Kuipers EJ, Poley JW, Steyerberg EW, Siersema PD. Publication bias does not play a role in the reporting of the results of endoscopic ultrasound staging of upper gastrointestinal cancers. *Endoscopy*. 2007;39(4):325-32.

van Zyl LT, Davidson PR. Delirium in hospital: an underreported event at discharge. *Canadian journal of psychiatry Revue canadienne de psychiatrie*. 2003;48(8):555-60.

Vandenbroucke JP, Rosendaal FR. Publication bias. *Lancet (London, England)*. 1994;343(8889):119.

Vandenbroucke JP. Passive smoking and lung cancer: a publication bias? *British medical journal (Clinical research ed)*. 1988;296(6619):391-2.

Vannacci A, Ravaldi C, Cosci F. Publication bias in complementary and conventional medicine. *European journal of clinical pharmacology*. 2005;61(2):161-2; author reply 3.

Vannoy SD, Andrews BK, Atkins DC, Dondanville KA, Young-McCaughan S, Peterson AL, et al. Under Reporting of Suicide Ideation in US Army Population Screening: An Ongoing Challenge. *Suicide & life-threatening behavior*. 2017;47(6):723-8.

Varallo FR, Guimaraes SdOP, Abjaude SAR, Mastroianni PdC. Causes for the underreporting of adverse drug events by health professionals: a systematic review. *Revista da Escola de Enfermagem da U S P*. 2014;48(4):739-47.

Vavken P, Dorotka R. The prevalence and effect of publication bias in orthopaedic meta-analyses. *Journal of orthopaedic science : official journal of the Japanese Orthopaedic Association*. 2011;16(2):238-44.

Vawdrey DK, Hripcsak G. Publication bias in clinical trials of electronic health records. *Journal of biomedical informatics*. 2013;46(1):139-41.

Vaz IMF, Freitas ATvdS, Peixoto MdRG, Ferraz SF, Campos MIVAM. Is energy intake underreported in hemodialysis patients? *Jornal brasileiro de nefrologia : 'orgao oficial de Sociedades Brasileira e Latino-Americana de Nefrologia*. 2015;37(3):359-66.

Vedachalam S, MacDonald LH, Shiferaw S, Seme A, Schwab KJ, investigators PMA. Underreporting of high-risk water and sanitation practices undermines progress on global targets. *PloS one*. 2017;12(5):e0176272.

Vedula SS, Goldman PS, Rona IJ, Greene TM, Dickersin K. Implementation of a publication strategy in the context of reporting biases. A case study based on new documents from Neurontin litigation. *Trials*. 2012;13:136.

Vega ML, Yin NC, Keller M. Desquamative Dermatitis Caused by Erlotinib: An Underreported Cutaneous Adverse Event. *Skinmed*. 2016;14(5):383-4.

Veitch E. Tackling publication bias in clinical trial reporting. *PLoS announces the launch of a new online journal. PLoS medicine*. 2005;2(10):e367.

Venincasa MJ, Kuriyan AE, Sridhar J. Effect of funding source on reporting bias in studies of intravitreal anti-vascular endothelial growth factor therapy for retinal vein occlusion. *Acta ophthalmologica*. 2019;97(2):e296-e302.

Ventura AK, Loken E, Mitchell DC, Smiciklas-Wright H, Birch LL. Understanding reporting bias in the dietary recall data of 11-year-old girls. *Obesity (Silver Spring, Md)*. 2006;14(6):1073-84.

Verbeek J. Moose Consort Strobe and Miamie Stard Remark or how can we improve the quality of reporting studies. *Scandinavian journal of work, environment & health*. 2008;34(3):165-7.

Veronese G, Marchesini G, Forlani G, Fabbri A, Italian Society of Emergency M. Are severe hypoglycemic episodes in diabetes correctly identified by administrative data? Evidence of underreporting from the HYPOTHESIS study. *Acta diabetologica*. 2016;53(4):677-80.

Vetter M, Huang DJ, Bosshard G, Guth U. Breast cancer in women 80 years of age and older: a comprehensive analysis of an underreported entity. *Acta oncologica* (Stockholm, Sweden). 2013;52(1):57-65.

Vevea JL, Woods CM. Publication bias in research synthesis: sensitivity analysis using a priori weight functions. *Psychological methods*. 2005;10(4):428-43.

Viau A, Arnaud S, Ferrer S, Iarmacovai G, Saliba M-L, Souville M, et al. Factors associated with physicians' under-reporting of asbestos-related bronchopulmonary cancers. Telephone survey conducted among general practitioners and pulmonologists randomly selected in the French region of Provence-Alpes-Cote-d'Azur. *La Revue du praticien*. 2008;58(19 Suppl):9-16.

Vignoletti F, Abrahamsson I. Quality of reporting of experimental research in implant dentistry. Critical aspects in design, outcome assessment and model validation. *Journal of clinical periodontology*. 2012;39 Suppl 12:6-27.

Visser TLS, Viet AL, Kroesbergen IHT, Seidell JC. Underreporting of BMI in adults and its effect on obesity prevalence estimations in the period 1998 to 2001. *Obesity* (Silver Spring, Md). 2006;14(11):2054-63.

Voide C, Darling KEA, Kenfak-Foguena A, Erard V, Cavassini M, Lazor-Blanchet C. Underreporting of needlestick and sharps injuries among healthcare workers in a Swiss University Hospital. *Swiss medical weekly*. 2012;142:w13523.

von Elm E, Altman DG, Pocock S, Vandembroucke JP, Egger M. Re: "quality of reporting of observational longitudinal research". *American journal of epidemiology*. 2005;162(10):1032-3; author reply 3.

von Knorring L. Evidence-based medicine, randomized controlled trials, publication bias, patient population, follow-up and access. *Nordic journal of psychiatry*. 2003;57(4):251.

Voss S, Kroke A, Klipstein-Grobusch K, Boeing H. Is macronutrient composition of dietary intake data affected by underreporting? Results from the EPIC-Potsdam Study. *European Prospective Investigation into Cancer and Nutrition. European journal of clinical nutrition.* 1998;52(2):119-26.

Voss S, Kroke A, Klipstein-Grobusch K, Boeing H. Obesity as a major determinant of underreporting in a self-administered food frequency questionnaire: results from the EPIC-Potsdam Study. *Zeitschrift fur Ernährungswissenschaft.* 1997;36(3):229-36.

Vuckovic-Dekic L. Good Scientific Practice. Part VII. Underpublishing/underreporting research. *Journal of BUON : official journal of the Balkan Union of Oncology.* 2005;10(1):43-6.

Vundavalli S, Naidu GM, Bhargav ASK, Praveen BH, Pavani B, Babburi S. Quality of reporting of randomized controlled trials in ten academic Indian dental journals. *Indian journal of dental research : official publication of Indian Society for Dental Research.* 2016;27(2):116-20.

Wager E, Williams P, Project Overcome failure to Publish nEgative fiNDings C. "Hardly worth the effort"? Medical journals' policies and their editors' and publishers' views on trial registration and publication bias: quantitative and qualitative study. *BMJ (Clinical research ed).* 2013;347:f5248.

Waldron M. Errors, omissions, and publication bias. *Diseases of the colon and rectum.* 2015;58(4):e53.

Walker A, Nixon J. Improving the quality of reporting in randomised controlled trials. *Journal of wound care.* 2004;13(3):103-6.

Walleser S, Hill SR, Bero LA. Characteristics and quality of reporting of cluster randomized trials in children: reporting needs improvement. *Journal of clinical epidemiology.* 2011;64(12):1331-40.

Walsworth-Bell JP. Under-reporting of medical terminations of pregnancy. *British journal of obstetrics and gynaecology.* 1992;99(11):931.

Walther S, Schuetz GM, Hamm B, Dewey M. Quality of reporting of systematic reviews and meta-analyses: PRISMA (Preferred Reporting Items for Systematic

reviews and Meta-Analyses). RoFo : Fortschritte auf dem Gebiete der Rontgenstrahlen und der Nuklearmedizin. 2011;183(12):1106-10.

Wan X, Zhou M-g, Wang L-j, Chen A-p, Yang G-h. Using general growth balance method and synthetic extinct generations methods to evaluate the underreporting of death at disease surveillance points from 1991 to 1998. Zhonghua liu xing bing xue za zhi = Zhonghua liuxingbingxue zazhi. 2009;30(9):927-32.

Wang G, Mao B, Xiong Z-Y, Fan T, Chen X-D, Wang L, et al. The quality of reporting of randomized controlled trials of traditional Chinese medicine: a survey of 13 randomly selected journals from mainland China. Clinical therapeutics. 2007;29(7):1456-67.

Wang J, Patten SB. Re: "Job strain and the risk of depression: is reporting biased?". American journal of epidemiology. 2011;174(1):125; author response -6.

Wang L, Dunson DB. Semiparametric bayes' proportional odds models for current status data with underreporting. Biometrics. 2011;67(3):1111-8.

Wang L, Li Y, Li J, Zhang M, Xu L, Yuan W, et al. Quality of reporting of trial abstracts needs to be improved: using the CONSORT for abstracts to assess the four leading Chinese medical journals of traditional Chinese medicine. Trials. 2010;11:75.

Wang L, Wang L-j, Cai Y, Ma L-m, Zhou M-g. Analysis of under-reporting of mortality surveillance from 2006 to 2008 in China. Zhonghua yu fang yi xue za zhi [Chinese journal of preventive medicine]. 2011;45(12):1061-4.

Wang L-j, Ma J-q, Zhou M-g, Wang Y-y, Ge H, Yang G-h. Study on the evaluation of underreporting and the quality of death cases reporting system, from medical institutions at county level and above, in 2005. Zhonghua liu xing bing xue za zhi = Zhonghua liuxingbingxue zazhi. 2007;28(6):571-5.

Wang X, Chen Y, Yang N, Deng W, Wang Q, Li N, et al. Methodology and reporting quality of reporting guidelines: systematic review. BMC medical research methodology. 2015;15:74.

Warren FC, Abrams KR, Golder S, Sutton AJ. Systematic review of methods used in meta-analyses where a primary outcome is an adverse or unintended event.

BMC Medical Research Methodology. 12. Article Number: 64. DOI: 10.1186/1471-2288-12-64. 2012.

Waterman J, Jankowski R, Madan I. Under-reporting of needlestick injuries by medical students. *The Journal of hospital infection*. 1994;26(2):149-50.

Watson A, Watson B, Vallmuur K. Estimating under-reporting of road crash injuries to police using multiple linked data collections. *Accident; analysis and prevention*. 2015;83:18-25.

Watzlawick R, Rind J, Sena ES, Brommer B, Zhang T, Kopp MA, et al. Olfactory Ensheathing Cell Transplantation in Experimental Spinal Cord Injury: Effect size and Reporting Bias of 62 Experimental Treatments: A Systematic Review and Meta-Analysis. *PLoS biology*. 2016;14(5):e1002468.

Watzlawick R, Sena ES, Dirnagl U, Brommer B, Kopp MA, Macleod MR, et al. Effect and reporting bias of RhoA/ROCK-blockade intervention on locomotor recovery after spinal cord injury: a systematic review and meta-analysis. *JAMA neurology*. 2014;71(1):91-9.

Wayant C, Scheckel C, Hicks C, Nissen T, Leduc L, Som M, et al. Evidence of selective reporting bias in hematology journals: A systematic review. *PloS one*. 2017;12(6):e0178379.

Webster SW, O'Toole R, O'Toole AW, Lucal B. Overreporting and underreporting of child abuse: teachers' use of professional discretion. *Child abuse & neglect*. 2005;29(11):1281-96.

Wei J-J, Yang W-T, Yin S-B, Wang C, Wang Y, Zheng G-Q. The quality of reporting of randomized controlled trials of electroacupuncture for stroke. *BMC complementary and alternative medicine*. 2016;16(1):512.

Weinstock MA, Colditz GA, Willett WC, Stampfer MJ, Rosner B, Speizer FE. Recall (report) bias and reliability in the retrospective assessment of melanoma risk. *American journal of epidemiology*. 1991;133(3):240-5.

Wells AJ. Passive smoking and lung cancer: a publication bias? *British medical journal (Clinical research ed)*. 1988;296(6629):1128.

Werchniak AE, Schwarzenberger K. Poison ivy: an underreported cause of erythema multiforme. *Journal of the American Academy of Dermatology*. 2004;51(5 Suppl):S159-60.

Wergeland E, Gjertsen F, Lund J. Mortality due to occupational injury is underreported. *Tidsskrift for den Norske laegeforening : tidsskrift for praktisk medicin, ny raekke*. 2009;129(10):981-6.

Wernham AGH, Kilgour JM, Ingram JR, Matin RN. A 5-year review of quality of reporting of research using clinician surveys in high-ranked dermatology journals. *The British journal of dermatology*. 2019.

Westreich R, Gozlan-Talmor A, Geva-Robinson S, Schlaeffer-Yosef T, Slutsky T, Chen-Hendel E, et al. The Presence of Snoring as Well as its Intensity Is Underreported by Women. *Journal of clinical sleep medicine : JCSM : official publication of the American Academy of Sleep Medicine*. 2019;15(3):471-6.

Wetterling T. Weight gain from atypical neuroleptics--an underreported adverse effect? *Fortschritte der Neurologie-Psychiatrie*. 2000;68(12):546-56.

White J, Noonan-Toly C, Lukacik G, Thomas N, Hinckley A, Hook S, et al. Lyme Disease Surveillance in New York State: an Assessment of Case Underreporting. *Zoonoses and public health*. 2018;65(2):238-46.

Whitehouse WG, Dinges DF, Orne EC, Orne MT. Hypnotic hypermnnesia: enhanced memory accessibility or report bias? *Journal of abnormal psychology*. 1988;97(3):289-95.

Whitfield CR, Raafat A, Urbaniak SJ. Underreporting of mortality from RhD haemolytic disease in Scotland and its implications: retrospective review. *BMJ (Clinical research ed)*. 1997;315(7121):1504-5.

Wicherts JM, Bakker M, Molenaar D. Willingness to share research data is related to the strength of the evidence and the quality of reporting of statistical results. *PloS one*. 2011;6(11):e26828.

Wiebe J, Detten G, Scheckel C, Gearhart D, Wheeler D, Sanders D, et al. The heart of the matter: Outcome reporting bias and registration status in cardio-thoracic surgery. *International journal of cardiology*. 2017;227:299-304.

Wiedermann CJ. Reporting bias in trials of volume resuscitation with hydroxyethyl starch. *Wiener klinische Wochenschrift*. 2014;126(7-8):189-94.

Wiegers TA, Kerkstra A. The quality of reporting in the extramural care of COPD. Standards and criteria. *TVZ : het vakblad voor de verpleging*. 1992(12):442-8.

Wilczynski NL. Quality of reporting of diagnostic accuracy studies: no change since STARD statement publication--before-and-after study. *Radiology*. 2008;248(3):817-23.

Williams AL, Al-Busaidi A, Sparrow PJ, Adams JE, Whitehouse RW. Under-reporting of osteoporotic vertebral fractures on computed tomography. *European journal of radiology*. 2009;69(1):179-83.

Williams D, Feely J. Underreporting of adverse drug reactions: attitudes of Irish doctors. *Irish journal of medical science*. 1999;168(4):257-61.

Williams KA, Sr., Kim JT, Holohan KM. Frequency of unrecognized, unreported, or underreported coronary artery and cardiovascular calcification on noncardiac chest CT. *Journal of cardiovascular computed tomography*. 2013;7(3):167-72.

Williamson IJS, Goodman D. Converging evidence for the under-reporting of concussions in youth ice hockey. *British journal of sports medicine*. 2006;40(2):128-32; discussion -32.

Williamson PR, Gamble C. Application and investigation of a bound for outcome reporting bias. *Trials*. 2007;8:9.

Willis BH, Quigley M. The assessment of the quality of reporting of meta-analyses in diagnostic research: a systematic review. *BMC medical research methodology*. 2011;11:163.

Wilmshurst P. Publication bias. *Lancet (London, England)*. 1991;337(8754):1419.

Wilson C, Kerr D, Noel-Storr A, Quinn TJ. Associations with publication and assessing publication bias in dementia diagnostic test accuracy studies. *International journal of geriatric psychiatry*. 2015;30(12):1250-6.

Winker M. Publication Bias: A remediable form of bias? *The National medical journal of India*. 2014;27(6):301-4.

Winkvist A, Persson V, Hartini TNS. Underreporting of energy intake is less common among pregnant women in Indonesia. *Public health nutrition*. 2002;5(4):523-9.

Winters M, Weir A. Grey matters; on the importance of publication bias in systematic reviews. *British journal of sports medicine*. 2017;51(6):488-9.

Wolfberg AJ. Conflict of interest related to clinical practice is underreported: The case of noninvasive prenatal testing. *Prenatal diagnosis*. 2018;38(3):219-21.

Wollina U, Heinig B, Tchernev G, Franca K, Lotti T. Unilateral Palmar Callus and Irritant Hand Eczema - Underreported Signs of Dependency on Crutches. *Open access Macedonian journal of medical sciences*. 2018;6(1):103-4.

Won J, Ahn Y, Song J, Koh D, Roh J. Occupational injuries in Korea: a comparison of blue-collar and white-collar workers' rates and underreporting. *Journal of occupational health*. 2007;49(1):53-60.

Wood JS, Donnell ET, Fariss CJ. A method to account for and estimate underreporting in crash frequency research. *Accident; analysis and prevention*. 2016;95(Pt A):57-66.

Woodward GL, Bienefeld MK, Ardal S. Under-reporting of live births in Ontario: 1991-1997. *Canadian journal of public health = Revue canadienne de sante publique*. 2003;94(6):463-7.

Wright DJ. Inaccuracy and under-reporting in certification of death following urethral stricture. *Medicine, science, and the law*. 1969;9(3):205-7.

Wu T-P, Huang Y-L, Liang F-W, Lu T-H. Underreporting of maternal mortality in Taiwan: A data linkage study. *Taiwanese journal of obstetrics & gynecology*. 2015;54(6):705-8.

Wuellner SE, Bonauto DK. Exploring the relationship between employer recordkeeping and underreporting in the BLS Survey of Occupational Injuries and Illnesses. *American journal of industrial medicine*. 2014;57(10):1133-43.

Xing H, Lin S-S, Yan P, Xiao J-X. Demicellization of a mixture of cationic-anionic hydrogenated/fluorinated surfactants through selective inclusion by alpha-

and beta-cyclodextrin. *Langmuir : the ACS journal of surfaces and colloids*. 2008;24(19):10654-64.

Xu C, Liu T-Z, Jia P-L, Liu Y, Li L, Cheng L-L, et al. Improving the quality of reporting of systematic reviews of dose-response meta-analyses: a cross-sectional survey. *BMC medical research methodology*. 2018;18(1):157.

Xu F, Sullivan EA, Black DA, Jackson Pulver LR, Madden RC. Under-reporting of birth registrations in New South Wales, Australia. *BMC pregnancy and childbirth*. 2012;12:147.

Yamamoto T, Hashiji J, Shankar VN. Underreporting in traffic accident data, bias in parameters and the structure of injury severity models. *Accident; analysis and prevention*. 2008;40(4):1320-9.

Yang H, Cherry CR, Su F, Ling Z, Pannell Z, Li Y, et al. Underreporting, crash severity and fault assignment of minor crashes in China-a study based on self-reported surveys. *International journal of injury control and safety promotion*. 2019;26(1):30-6.

Yeast JD. Frequent occurrence of underreporting multiple gestations based on vaginal and abdominal ultrasonograms performed prior to 6 weeks' gestational age. *Journal of ultrasound in medicine : official journal of the American Institute of Ultrasound in Medicine*. 1998;17(9):594.

Yeow VKL, Lee ST, Cheng JJ, Koh A, Wong HB, Machin D. Randomised clinical trials in plastic surgery: survey of output and quality of reporting. *Journal of plastic, reconstructive & aesthetic surgery : JPRAS*. 2007;60(8):965-6.

Yokoyama Y, Sasaki S, Suzukamo Y, Yamazaki S, Takegami M, Kakudate N, et al. Interpersonal psychosocial factors associated with underreported dietary energy intake in hemodialysis patients. *Journal of renal nutrition : the official journal of the Council on Renal Nutrition of the National Kidney Foundation*. 2013;23(1):37-44.

Yoon U, Knobloch K. Quality of reporting in sports injury prevention abstracts according to the CONSORT and STROBE criteria: an analysis of the World

Congress of Sports Injury Prevention in 2005 and 2008. *British journal of sports medicine*. 2012;46(3):202-6.

Yoshimoto Y. Publication bias in neurosurgery: lessons from series of unruptured aneurysms. *Acta neurochirurgica*. 2003;145(1):45-8.

Young JD. Underreporting of Lyme disease. *The New England journal of medicine*. 1998;338(22):1629.

Yousefi MR, Hua J, Sima C, Dougherty ER. Reporting bias when using real data sets to analyze classification performance. *Bioinformatics (Oxford, England)*. 2010;26(1):68-76.

Yu J, Li X, Li Y, Sun X. Quality of reporting in surgical randomized clinical trials. *The British journal of surgery*. 2017;104(3):296-303.

Yuan JC-C, Shyamsunder N, Barao VAR, Lee DJ, Sukotjo C. Publication bias in five dental implant journals: an observation from 2005 to 2009. *The International journal of oral & maxillofacial implants*. 2011;26(5):1024-32.

Zafar A, Khan GI, Siddiqui MAR. The quality of reporting of diagnostic accuracy studies in diabetic retinopathy screening: a systematic review. *Clinical & experimental ophthalmology*. 2008;36(6):537-42.

Zafarmand MH, van der Schouw YT, Grobbee DE, de Leeuw PW, Bots ML. The M235T polymorphism in the AGT gene and CHD risk: evidence of a Hardy-Weinberg equilibrium violation and publication bias in a meta-analysis. *PloS one*. 2008;3(6):e2533.

Zakar MZ, Zakar R, Mustafa M, Jalil A, Fischer F. Underreporting of stillbirths in Pakistan: perspectives of the parents, community and healthcare providers. *BMC pregnancy and childbirth*. 2018;18(1):302.

Zaki I, Dalziel KL, Solomonsz FA, Stevens A. The under-reporting of skin disease in association with squamous cell carcinoma of the vulva. *Clinical and experimental dermatology*. 1996;21(5):334-7.

Zakrzewska JM, Lopez BC. Quality of reporting in evaluations of surgical treatment of trigeminal neuralgia: recommendations for future reports. *Neurosurgery*. 2003;53(1):110-20; discussion 20-2.

Zalesin KC, Miller WM, Franklin B, Mudugal D, Rao Buragadda A, Boura J, et al. Vitamin a deficiency after gastric bypass surgery: an underreported postoperative complication. *Journal of obesity*. 2011;2011.

Zanger P, Habscheid W, Kremsner PG, Dahm HH. *Schistosoma japonicum* infection and rectal carcinoid tumour: underreported coincidence or neglected association? *Epidemiology and infection*. 2010;138(9):1289-91.

Zangrillo A, Annalisa F, Crescenzi G, Pappalardo F, Boroli F, Sottocorna O, et al. Underreporting of conversion from off-pump coronary artery bypass surgery. *Anesthesiology*. 2005;103(4):902; author reply -3.

Zer A, Prince RM, Amir E, Abdul Razak A. Evolution of Randomized Trials in Advanced/Metastatic Soft Tissue Sarcoma: End Point Selection, Surrogacy, and Quality of Reporting. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. 2016;34(13):1469-75.

Zhai X, Cui J, Wang Y, Qu Z, Mu Q, Li P, et al. Quality of Reporting Randomized Controlled Trials in Five Leading Neurology Journals in 2008 and 2013 Using the Modified "Risk of Bias" Tool. *World neurosurgery*. 2017;99:687-94.e7.

Zhang G, Lesouef PN. From Paul's predictions in the World Cup to the publication bias in genetic studies on complex traits. *The European respiratory journal*. 2010;36(5):1218-9.

Zhang Y-Y, Zhou X-B, Wang Q-Z, Zhu X-Y. Quality of reporting of multivariable logistic regression models in Chinese clinical medical journals. *Medicine*. 2017;96(21):e6972.

Zhao J, Stockwell T, Thomas G. An adaptation of the Yesterday Method to correct for under-reporting of alcohol consumption and estimate compliance with Canadian low-risk drinking guidelines. *Canadian journal of public health = Revue canadienne de sante publique*. 2015;106(4):e204-9.

Zhu H, Chen S, Xie P, Yang G, Zhong Z, Zhang H, et al. Quality of Reporting in Oncology Randomized Controlled Trials: From 2011 to 2015. *Cancer control : journal of the Moffitt Cancer Center*. 2018;25(1):1073274818781309.

Zhu Q, Carriere KC. Detecting and correcting for publication bias in meta-analysis - A truncated normal distribution approach. *Statistical methods in medical research*. 2018;27(9):2722-41.

Zhu Y, Duijvesz D, Rovers MM, Lock TM. Evidence-based urology in practice: publication bias. *BJU international*. 2011;107(2):337; author reply -8.

Zhuang L, He J, Zhuang X, Lu L. Quality of reporting on randomized controlled trials of acupuncture for stroke rehabilitation. *BMC complementary and alternative medicine*. 2014;14:151.

Zigerell LJ. Potential publication bias in the stereotype threat literature: Comment on Nguyen and Ryan (2008). *The Journal of applied psychology*. 2017;102(8):1159-68.

Zilberberg MD. Assessment of reporting bias for *Clostridium difficile* hospitalizations, United States. *Emerging infectious diseases*. 2008;14(8):1334.

Zimpel T, Windeler J. Publications of dissertations on unconventional medical therapy and diagnosis procedures--a contribution to "publication bias". *Forschende Komplementarmedizin und klassische Naturheilkunde = Research in complementary and natural classical medicine*. 2000;7(2):71-4.

Ziogas DC, Zintzaras E. Analysis of the quality of reporting of randomized controlled trials in acute and chronic myeloid leukemia, and myelodysplastic syndromes as governed by the CONSORT statement. *Annals of epidemiology*. 2009;19(7):494-500.

Zorzela L, Golder S, Liu Y, Pilkington K, Hartling L, Joffe A, et al. Quality of reporting in systematic reviews of adverse events: systematic review. *BMJ (Clinical research ed)*. 2014;348:f7668.

Zou CX, Becker JE, Phillips AT, Garritano JM, Krumholz HM, Miller JE, et al. Registration, results reporting, and publication bias of clinical trials supporting

FDA approval of neuropsychiatric drugs before and after FDAAA: a retrospective cohort study. *Trials*. 2018;19(1):581.

Zullino DF, Krenz S, Eap CB, Benguettat D, Khan R. Over- and underreporting of recent drug use in subjects entering an inpatient detoxification unit. *European journal of medical research*. 2008;13(1):15-20.

Zwart JJ, Yazdani ST, Harvey MS, de Vries RRP, van Roosmalen J. Underreporting of major obstetric haemorrhage in the Netherlands. *Transfusion medicine (Oxford, England)*. 2010;20(2):118-22.

Zwetsloot P-P, Van Der Naald M, Sena ES, Howells DW, IntHout J, De Groot JA, et al. Standardized mean differences cause funnel plot distortion in publication bias assessments. *eLife*. 2017;6.

AUTHOR BIO

Received a Ph. D. in Aerospace and Mechanical Sciences from Princeton University in 1967, and subsequently worked for:

- Bell Laboratories;
- Department of Energy;
- Office of Naval Research;
- MITRE Corp.

Presently, Research Affiliate at Georgia Institute of Technology.

Published over 200 peer-reviewed articles, served as Guest Editor of four journal Special Issues since 1994, and obtained two text mining system patents. Published on numerous medical topics in the peer-reviewed literature, including:

- potential treatments for Multiple Sclerosis, Parkinson's Disease, Raynaud's Phenomenon, Cataracts, SARS, Vitreous Restoration, and Chronic Kidney Disease;
- potential causes of Chronic Kidney Disease and Alzheimer's Disease;
- potential treatment protocol for prevention and reversal of Alzheimer's Disease;
- impacts of toxin combinations on determining Exposure Limits;
- inadequacies of present Occupational Exposure Limits;
- treatment re-purposing;
- potential impacts of Electromagnetic Fields on health.

Listed in:

- Who's Who in America, 60th Edition (2006);
- Who's Who in Science and Engineering, 9th Edition (2006); and
- 2000 Outstanding Intellectuals of the 21st Century, 4th Edition, (2006).